

E2778

**ROYAL GOVERNMENT OF BHUTAN**

**ENVIRONMENTAL AND SOCIAL  
MANAGEMENT FRAMEWORK**

**SECOND PHASE OF THE ADAPTABLE  
PROGRAM LOAN ON  
STRENGTHENING REGIONAL COOPERATION  
FOR WILDLIFE PROTECTION IN ASIA**

**APRIL, 2011**

## ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank	IP	Indigenous People
APL	Adaptive Policy Lending	IPP	Indigenous Peoples Plan
ASEAN-WEN	Association of South East Asian Nations – Wildlife Enforcement Network	IUCN	International Union for the Conservation of Nattier
CA	Competent Authority	M&E	Monitoring and Evaluation
CBD	Convention of Biological Diversity	masl	meters above sea level
CBO	Community Based Organization	MDGs	Millennium Development Goals
CFO	Chief Forest Officer	MOAF	Ministry of Agriculture and Forests
CITES	Convention on International Trade in Endangered Species	NEC	National Environmental Commission
DANIDA	Danish International Development Agency	NEPA	National Environmental Protection Act
DOFPS	Department of Forests and Park Services	NGO	Non-Governmental Organization
DYT	Dzongkhag Yarge Tshogdu	NLC	National Land Commission
EA	Environmental Assessment	OP	Operational Policy
EAA	Environmental Assessment Act	PA	Protected Area
EC	Environmental Clearance	PAF	Project Affected Families
EMF	Environmental Management Framework	PAP	Project Affected Person
EMP	Environmental Management Plan	PDO	Project Development Objective
ESMF	Environmental and Social Management Framework	PIU	Project Implementation Unit
FNCA	Forest and Nature Conservation Act	PSIA	Poverty and Social Impact Assessment
FNCR	Forest and Nature Conservation Rules	RECOP	Regulation for Environmental Clearance of Projects
FY	Fiscal Year	RGOB	Royal Government of Bhutan
GAP	Gender Action Plan	ROSC	Regional Operational Steering Committee
GDP	Gross Domestic Product	RP	Resettlement Plan
GEF	Global Environment Facility	SAARC	South Asia Association for Regional Cooperation
GFR	Government Forest Reserve	SACEP	South Asia Cooperative Environment Programme
GRC	Grievance Resolution Committee	SA-WEN	South Asian Wildlife Enforcement Network
GTI	Global Tiger Initiative	SAWTI	South Asia Wildlife Trade Initiative
GYT	Geog Yaege Tshonchung	SMF	Social Management Framework
HH	Household	SPAF	Serious Project Affected Families
HWC	Human Wildlife Conflict	STD	Sexually Transmitted Disease
ICT	Information Communication Technology	TA	Technical Assistance
IDA	International Development Association	TOR	Terms of Reference
INR	Indian Rupee	TRAFFIC	Wildlife Trade Monitoring Network
INTERPOL	International Criminal Police Organization	UNDP	United Nations Development Programme

UNEP	United Nations Environmental Programme
UNODC	UN Office of Drugs and Crime
VRCE	Virtual Regional Center of Excellence
WCD	Wildlife Conservation Division
WCPA	World Commission on Protected Areas
World Bank	International Development Association
WWF	World Wildlife Fund

## Contents

1.	INTRODUCTION .....	1
1.1	Project Background.....	1
1.2	Need for an Environmental and Social Management Framework .....	1
2.	DESCRIPTION OF THE PROJECT .....	3
2.1	Project Development Objective .....	3
2.2	Project Descriptions .....	3
2.2.1	Landscape approach for regional cooperation in wildlife conservation and protection.....	3
2.2.2	Project components .....	4
3.	RELEVANT SAFEGUARDS POLICIES AND REGULATIONS .....	8
3.1	Royal Government of Bhutan’s Applicable Policies and Regulations .....	8
3.1.1	Constitution of the Kingdom of Bhutan (2008) .....	8
3.1.2	Bhutan 2020 .....	8
3.1.3	National Environment Strategy (1998) .....	8
3.1.4	National Environmental Protection Act of Bhutan, 2007 .....	8
3.1.6	Regulation for Environmental Clearance of Projects (RECOP) .....	9
3.1.7	Environmental Monitoring .....	9
3.1.8	Forest and Nature Conservation Act, 1995 .....	11
3.1.9	Forest Policy .....	12
3.1.10	Forest and Nature Conservation Rules, 2006.....	13
3.1.11	Biodiversity Act of Bhutan, 2003 .....	13
3.1.12	Land Act, 2007.....	13
3.2	World Bank Operational Policies and Procedures Applicable to the Project .....	14
3.2.1	Compliance with OP 4.01 – Environmental Assessment.....	14
3.2.2	Compliance with OP 4.01 Annex C Environmental Action Plans (or Environmental Management Plans).....	15
3.2.3	Compliance with OP 4.04 Natural Habitats .....	16
3.2.4	Compliance with OP 4.12 Involuntary Resettlement.....	16
<b>3.3.5</b>	Application of OP 4.10 Indigenous Peoples .....	17
<b>3.3.6</b>	Adequacy of National Environmental and Social Clearances of RGOB .....	18
4.	ENVIRONMENTAL MANAGEMENT FRAMEWORK .....	19
4.1	Environmental Management Tools .....	19
4.1.1	Environmental Screening .....	19

4.1.2	Environmental Assessment .....	19
4.1.3	Environmental Management Plan .....	20
	<i>Guidelines for Developing EMPs</i> .....	21
4.1.4	Environmental Audits .....	22
4.1.5	Environmental Codes and Best Management Practices .....	23
4.2	Preliminary Assessment of Environment, Environmental Impacts and Mitigation Measures....	23
4.2.1	Country Environment.....	23
4.2.2	Preliminary Assessment of Project Impacts.....	25
4.2.3	Environmental Mitigation Measures.....	28
5.	<b>SOCIAL MANAGEMENT FRAMEWORK</b> .....	31
5.1	Definitions.....	31
5.1.1	General Definitions.....	31
5.1.2	Social Assessment.....	32
5.2	Assessments and Documentation.....	37
5.2.1	Preliminary Screening.....	37
5.2.2	Activity Preparation .....	37
5.2.3	Poverty and Social Impact Assessment (PSIA) .....	38
5.2.4	Resettlement Plan (RP).....	38
5.2.5	Social Safeguards Monitoring and Evaluation Approach .....	38
5.3	Grievance Redressal Mechanism.....	39
5.4	Public Consultation and Participation.....	40
5.4.1	Consultation Strategy .....	41
5.4.2	Key Impact Areas and Indicators.....	41
6.	<b>GENDER DEVELOPMENT FRAMEWORK</b> .....	43
6.1	Gender Terminology .....	43
6.2	Process to Follow .....	44
6.2.1	Specific Checklists to be covered during various stages of sub-project cycles .....	45
7.	<b>PLANNING, IMPLEMENTATION &amp; MONITORING ARRANGEMENTS FOR ENVIRONMENTAL AND SOCIAL SAFEGUARDS MANAGEMENT</b> .....	49
7.1	Planning, Implementation and Monitoring Arrangements for ESMF.....	49
7.2	Stakeholder Consultation and Disclosure .....	49
7.3	Capacity Building and Training .....	50
	Annex 1 - Environmental Checklist.....	51

Annex 2 – Social Screening Format ..... 57

Annex 3 – Generic Guidelines/ TOR for Poverty and Social Impact Assessment ..... 60

Annex 4 - Entitlement Matrix ..... 62

Annex 5 - Social Monitoring Indicators ..... 63

Annex 6 - Safeguards Capacity Assessment Process..... 64

Annex 7 - TORs for Social Development and Environmental Officers ..... 65

# 1. INTRODUCTION

## 1.1 Project Background

Natural habitats are vital for assuring sustainable development. Wild habitats are the repositories of biological diversity (biodiversity) which are the raw material for natural selection and adaptation.<sup>1</sup> They provide myriad services that enrich and sustain human life with both tangible and intangible economic and social value – including watershed protection, biological control of pests, crop pollination – and life-sustaining environmental services, such as breathable air and usable water. Imbalances in natural environments have been implicated in floods, declining water availability and quality, soil fertility loss, erosion, silting of rivers, poverty, the spread of diseases such as ebola, malaria, and the proliferation of invasive species. Goal 7 of the Millennium Development Goals (MDGs) seeks to reduce biodiversity loss, recognizing the link between poverty and natural resource depletion. Although quantification of economic benefits is difficult, there is strong evidence that conserving natural ecosystems, and the species that sustain it, makes sound economic sense. Moreover, given the scale of destruction in recent decades there are high payoffs to conservation with often increasing returns to the investment.

Recognizing the importance of preserving biological diversity a number of global treaties have been established. They include the Convention on Biological Diversity (CBD, 1992), the Convention on International Trade in Endangered Species (CITES, 1981), the Convention on Wetlands (RAMSAR, 1971) and international institutions have formed around environmental issues such as the United Nations Environmental Program (UNEP), the International Union for the Conservation of Nature (IUCN), the Global Environmental Facility (GEF) and a myriad of national and international NGOs. Most countries of the world have recognized the importance of conservation of both terrestrial and aquatic habitats and have adopted legislation and created institutions for the protection of wildlife and their habitats.

Biodiversity is especially important to South Asia which is home to 13 – 15% of the world's biodiversity and hosts some of the most charismatic and endangered species on Earth. The forests of Gir in India are the last refuge of the world's remaining 250 – 300 Asiatic wild lions. Habitats across Bangladesh, Bhutan, India and Nepal are home to over 65% of the 3,000 or so remaining wild tigers and the Himalayas is the last redoubt of the critically endangered snow leopard, whose numbers are unknown. India is classified as a mega-diverse country and the Eastern Himalayas (encompassing numerous countries) a biodiversity hotspot.<sup>2</sup> Reflecting its rich natural heritage, a conservation ethos is deeply engrained in the culture and history of South Asia. The first recorded conservation edicts in South Asia date to the 4th century BC when the emperor Ashoka issued royal decrees to protect elephants from hunting and capture.

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<sup>1</sup> Particularly important are the so-called “keystone” species that generate vital ecological services. Disappearance of a keystone can trigger cascading impacts through the habitat, with the loss of one species prompting the loss of still others. An example of keystone species are the top predators who play a vital role in maintaining balance and sustaining the interconnected web of life – vegetation (biomass), herbivores and their predators. They serve as “bellwethers” for the health of the ecosystem that harbor them and their decline is often a clear signal of grave imbalances. Habitats where they thrive are typically the high-value ecosystems that provide economic value through (un-priced but life sustaining) services such as carbon sequestration, maintenance of hydrological balance, crop pollination, protection from natural disasters and soil erosion and preservation of plant genetic diversity. Large predators are thus powerful symbols of all that is irreplaceable and biologically significant in nature.

<sup>2</sup> The mega-diverse countries are a group of countries in which less than the 10% of the global land surface has more than the 70% of the land's biodiversity. Most of these countries are located in the tropics. A biodiversity hotspot is a bio- region with a significant reservoir of diversity that is under threat from humans. It was first defined by Myers in 1988 - based on well described criteria.

The charismatic appeal of many species can generate additional economic benefits from conservation. Ecotourism is globally the fastest growing and most profitable segment of the tourist industry.<sup>3</sup> Estimates suggest that the tourism revenues from habitats rich in biodiversity – though still under-priced and far below potential – run into significant sums and contribute significantly to livelihoods of the poorest. A recent valuation study finds that, on average, each hectare of dense forest in India generates a net present value from ecotourism of about INR 65,192 (US\$1,350). With an estimated 390,000 hectares of dense forest remaining in India, studies suggest that this constitutes a total economic contribution of approximately US\$636 million.<sup>4</sup> This figure underestimates the potential value of undisturbed natural habitats because it excludes the myriad other benefits that forests bring – such as timber, fodder, traditional medicines, bio-prospectivity (e.g. new medicines), non-timber forest products and watershed benefits among others – as well as the non-use (preservation) values. The distributional impacts are, perhaps, even more significant. Aside from timber, most of the benefits from forest resources accrue to the poor and account for more than 50% of their (implied) consumption.<sup>5</sup> It is estimated that including these benefits would bring the economic benefits into the high billions of dollars, though more refined calculations are still in progress.<sup>6</sup>

Bhutan, a small Eastern Himalayan country, ranks in the top 10% of countries with the highest species richness per unit area in the world. It has been designated as one of the ten Biodiversity Hotspots in the world and the centre of 221 Global Endemic Bird Areas. The rich biodiversity of Bhutan includes more than 120 species of butterflies, 28 of which are endemic to the Eastern Himalayas, and as many as 750 plant species endemic to the Eastern Himalayas. Bhutan's ecosystems are represented by sub-tropical forests, warm and cool broad-leaved forests, evergreen oak forests, chir pine forests, alpine meadows, and more. To protect its biodiversity, Bhutan has the highest proportion of forest cover and protected areas of any Asian nation. Most Bhutanese still practice subsistence agriculture, but the agricultural system is in the initial phase of modernization. Bhutanese farmers primarily cultivate traditional crop varieties and depend on forest resources for their livelihood. Despite the Royal Government's conservation efforts, threats to biodiversity are emerging with the acceleration of economic development. Protected areas cover 26% of Bhutan's territory whereas 9% of additional land has been declared as biological corridors connecting the protected areas. With the addition of conservation areas, more than 35% of the country's area is under some form of conservation management. To ensure the conservation of ecosystem and habitat biodiversity, the Royal Government has a policy guaranteeing that at least 60 % forest cover will be maintained at all times. In addition, 26% of the total land area representing all climatic and biodiversity zones is under protected area management and an additional 9 % is set aside as biological corridors. In terms of species diversity conservation, the Royal Government is implementing several conservation programmes including the Tiger Conservation Programme and the Social Forestry Programme, which encourages local people to plant trees on private or community land. There is also an anti-poaching programme that has led to regular patrols in all protected areas to prevent poaching of animals and medicinal plants<sup>7</sup>.

South East Asia also covers a remarkable portion of the world's biodiversity with the habitats in the region being among the most diverse in the world. Indonesia, for example, is the world's most biologically diverse country. Laos has a rich biodiversity, particularly in its wildlife, mainly due to the

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<sup>3</sup><http://www.ecotourism.org/atf/cf/%7B82a87c8d-0b56-4149-8b0a-c4aaed1cd38%7D/TIES%20GLOBAL%20ECOTOURISM%20FACT%20SHEET.PDF>

<sup>4</sup> Gundimenda H, S. Sanyal, R Sinha and P Sukhdev, 2009, *The Value of Biodiversity in India's Forests*, Deutsche Bank

<sup>5</sup> See for example Gundimenda *et al* (*op cit*) and also Gundimenda H, S. Sanyal, R Sinha and P Sukhdev, 2009, *The Value of Timber and Non Timber Forest Products in India's Forests*, Deutsche Bank

<sup>6</sup> These include livelihood benefits as well as the benefits that accrue from conservation (which is a pure public good). A pure public good is one that is non rival in consumption implying that the consumption by one person does not detract from its use by another. It is non-excludable in that its benefits cannot be restricted without cost (e.g. clean air, extinction are examples of a public good and a public bad respectively).

<sup>7</sup> <http://www.cbd.int/countries/profile.shtml?country=bt#status>



low population density, mountainous terrain, and thus, high remaining forest cover. In Laos, the rural poor are highly reliant on forest resources. The country's non-timber forest products (NTFPs) sustain livelihoods and act as a food security net for villagers (especially the lowest income ones) living in and near protected areas. South East Asia is also experiencing a major loss of biodiversity, with primary forest cover declining by 95% and individual countries losing 70-90% of their original wilderness. The key threats to wildlife are shifting cultivation within and on the edges of protected areas, overhunting of prey species to supply domestic trade, international illegal wildlife trade for food, medicines and ornaments smuggled through porous borders to neighboring markets (China, Vietnam), weak wildlife law enforcement capacity, etc.

Beyond Asia, examples abound of conservation generating benefits for the rural poor. Nearly three-quarters of the recorded protein consumption in Africa is derived from plant sources and food from the wild, particularly in times of stress, such as drought or floods. More importantly, new models demonstrate that sustainable and (relatively) high incomes are available to poor communities from conservation and profit sharing practices of eco-tourism that prevent excessive migration and overdevelopment. Successful conservation examples include communal areas of Namibia where communities routinely earn in excess of US\$0.5 million each year from eco-tourism. Under the Masai Porini (Kenya) project, the local community leases out land to a private wildlife conservancy. Benefits in the form of an annual income of about US \$50,000 accrue to the formerly poverty stricken community. The project has helped to build schools for the community, sponsor local children through tertiary education systems, provide watering points for pastoral communities, vehicle transport and enable controllable grazing within the conservancy during times of great need.<sup>8</sup>

Governments in Asia are keenly aware of the benefits that biodiversity brings and the risks of biodiversity loss. The region's countries have been among the world's leaders in adopting legislation and ratifying international conventions for biodiversity conservation. South Asia – especially India – is a center of cutting-edge research on natural resource management and habitat conservation. Asia's countries have adopted legislation for protection of endangered species and their habitats. They have devoted substantial resources to habitat conservation and, more recently, to enforcement of anti-poaching legislation. For example, India has more than doubled the budget available for wildlife protection from about US\$15.3 million in 2008-09 to about US\$38 million in 2009-2010.<sup>9</sup> Laos increased its budget for protected area activities to US\$300,000 in FY2009/2010 from a mere US\$10,000 in earlier years. Despite the investments, Asia faces daunting challenges that are growing more severe. Habitat fragmentation and poaching for illegal wildlife trade are the most significant threats to biodiversity.

**Habitat loss.** Not only do many of the high profile endangered species (such as the top predators and elephants) require large amounts of land, but their habitats need to be connected as well to assure long-term genetic survival. Through much of South Asia, the forest frontier has largely stabilized as a result of past large scale conversions of habitats (though there are notable exceptions in the conflict-prone and forested mineral and plantation belts). Approximately 5% of land in the region has been granted Protected Area (PA) status which confers varying degrees of legal and actual sanctuary to wildlife.<sup>10</sup> But it is the forest corridors linking these PAs that are under constant and unrelenting pressure from intrusive structures, such as new roads and expanding settlements. As a result, many endangered species subsist in

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<sup>8</sup> <http://www.unep.org/GC/GCSS-IX/Documents/Kenya-2C.pdf>

<sup>9</sup> India Today, July 6, 2009

<sup>10</sup> The level of protection accorded legally and in practice varies considerably. In Bhutan, large tracts of land in PAs contain farms, houses a growing number of roads, logging and small industry. In India, however, the land under PA management is small (about 4.8%) and most forms of anthropogenic interference and commerce are legally discouraged from these areas.

isolated population clusters. Small, fragmented breeding populations are especially fragile and at risk of genetic bottlenecks, a condition that reduces the capacity to adapt to changing conditions.<sup>11</sup>

**Poaching.** Though habitat fragmentation is a severe problem, it remains a medium-term threat. The most serious and immediate risk to many species is poaching for wildlife trade. Wildlife are killed for the flourishing illegal international trade in their skins, bones, flesh, fur, used for decoration, clothing, medicine, and unconventional exotic food. The primary market for many of these products is outside South Asia – often in East Asia for items of presumed pharmacological utility.

The wildlife trade is big business. But due to the clandestine nature of the enterprise, reliable estimates of the composition, volume and value of the trade remain elusive. The International Criminal Police Organization (INTERPOL) suggests that the global value of the illegal wildlife related trade exceeds US\$20 billion per year and probably ranks third after narcotics and the illegal weapons trade.<sup>12</sup>

**Illegal trade.** South Asian countries account for 13 to 15% of the world's biodiversity and so remain a lucrative target of the trade. Victims of the trade include the iconic tiger and elephant, the snow leopard, the common leopard, the one-horn rhino, pangolin, brown bear, several species of deer and reptiles, seahorses, star tortoises, butterflies, peacocks, hornbills, parrots, parakeets and birds of prey, and corals. Poaching techniques can be extremely gruesome – the more egregious methods include skinning or de-horning live animals – and transportation of live creatures in inhumane conditions.

Particularly damaging is the banned trade in tiger parts much of which is used for its presumed pharmaceutical benefits. The World Chinese Medicine Society has declared that tiger parts are not necessary in traditional medicines and that alternatives are available and effective. Yet the illegal trade still flourishes. Poaching has become so intense that tigers have disappeared from many parks throughout Asia. Nowhere has the impact been greater than in India and Nepal which remain the bastions of tiger conservation. Nepal has emerged as the transit hub for the trade in illegal wildlife commodities destined for consumption in East China. Laos is recognized as both a source and transit country while Viet Nam is a transit hub for illegal wildlife trade.

The economic value of the illegal wildlife trade is determined primarily by cross-border factors. Wildlife are poached in one country, stockpiled in another, and then traded beyond the South Asia region. Lack of uniformity in enforcement can result in migration of the trade to other countries with less stringent enforcement. The trade is controlled by criminal organizations which have considerable power over the market and the prices paid to poachers and carriers, making control of the trade even more challenging.<sup>13</sup> The UN Office of Drugs and Crime (UNODC) suggest that wildlife traders have links to other organized criminal activities (e.g. narcotics), presumably a reflection of the increasing returns to cross-border criminal activities. By contrast, poaching is often carried out by local or forest dwelling populations who receive only a fraction of the final price of the product. The magnitude and complexity of the problems are such that they now frequently transcend national boundaries and call for knowledge sharing and compatible policies with renewed energy across the supply chain.

**Responses.** Commendable efforts have been made by all the countries in South Asia to protect their wildlife and great strides have been taken and important lessons learned. All the countries are signatories

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<sup>11</sup> For as science suggests “ It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one most adaptable to change.” *The Origin of Species* Charles Darwin (1859)

<sup>12</sup> Sinha S. 2010. Handbook on Wildlife Law Enforcement in India. TRAFFIC India/WWF India, New Delhi. Natraj Publisher.

<sup>13</sup> Technically, this market structure is complex and poses regulatory challenges. The market resembles an inverted wine glass. A large number of potential poachers (forest dwellers) operate under quasi open access conditions. The poached commodity is then sold to traders – the organized gangs – who are few in number and thus operate under oligopolistic conditions (i.e. have market control) and the product is sold via retailers to a large number of consumers. Where controls are optimally applied to cause the greatest disruption is not obvious – given the imperfectly competitive “middle”. See Bulte E. H. and R. Damania “The Wildlife Trade” *Ecological Economics*, 2006.

to CITES, which was set up to promote cooperative responses to the effects of trade on endangered species. A number of regional initiatives have also emerged and include SACEP (South Asia Cooperative Environment Programme), SAWTI (South Asia Wildlife Trade Initiative), and SAARC Convention on Cooperation on Environment, but have not been resourced adequately to implement activities. Most recently recognizing the grave threats posed to wildlife from the illegal trade, all countries in South Asia agreed at the First Meeting on Illegal Wildlife Trade in South Asia convened by the Government of Nepal and held in Kathmandu on May 17-19, 2010 to develop institutional mechanisms to promote harmonized and collaborative approaches to common threats. The modalities of this agreement and the ensuing legal structures are still under discussion. Despite investments in conservation and the efforts of stakeholders, illegally traded species are in fast decline.

It is clear that no one country – acting alone – can eliminate the perils to South Asia's wild resources. Improved and more effective patrolling of protected areas (PAs) is one approach for addressing the poaching threat. However, tackling the challenge calls for a regional approach. Close collaboration is needed among nations and regions along the trade route, as well as the centers of consumption (e.g., East Asia and North America).<sup>14</sup> In this context, an opportunity has emerged for East Asia to link or collaborate with its neighboring South Asia region in addressing common national and regional goals and strategies of wildlife protection.

Countries in South and Southeast Asia are committed to the pursuit of collaborative responses to the effects of trade on endangered species. A number of regional initiatives have emerged, such as the South Asia Cooperative Environment Programme (SACEP), South Asia Wildlife Trade Initiative (SAWTI), South Asian Association for Regional Cooperation (SAARC) Convention on Cooperation on Environment and the Association of South East Asian Nations Wildlife Enforcement Network (ASEAN-WEN). However, these organizations have not been resourced adequately to implement activities. Most recently, in recognition of the grave threats to wildlife from illegal trade, all countries in South Asia agreed at the First Meeting on Illegal Wildlife Trade in South Asia – convened by the Government of Nepal in Kathmandu in May 2010 – to develop institutional mechanisms for harmonizing and collaborating against common threats, including setting up the South Asia Wildlife Enforcement Network (SA-WEN).

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<sup>14</sup> Numerous NGOs focus on demand side management and, through the GTI, the Bank is engaging on this issue. The communications component of this project offers an opportunity to address some of these complex issues.

## **1.2 Need for an Environmental and Social Management Framework**

The Environmental and Social Management Framework (ESMF) provides general environmental and social policies, guidelines, codes of practice and procedures to be integrated into the implementation of the World Bank-supported APL on Strengthening Cross-Regional Cooperation for Wildlife Protection in Asia (referred as Wildlife Project from here onwards). The purpose of this document is to outline a Framework for Environmental and Social Management, giving brief details of potential environmental and social issues typically associated with the planning and implementation of the project activities envisaged under the Wildlife Project and provide guidelines on how to carry out Environmental Assessments (EAs), Poverty and Social Impact Assessments (PSIAs), prepare Environmental Management Plans (EMPs), Gender Action Plan (GAP) and Resettlement Plans (RPs) where necessary to mitigate project induced negative environmental and social impacts and enhance positive environmental and social impacts of the project interventions.

An ESMF for the Wildlife Project is essential because sub-project specific environmental and social impacts cannot be precisely identified upfront before sites are selected, detailed site investigations are carried out as part of identifying specific project activities and related designs at the selected locations. The ESMF will provide the necessary background for environmental and social considerations, a checklist of potential environmental and social issues of the project activities to be considered and built into the design of the project so that environmentally and socially sustainable implementation can take place. The ESMF highlights review of relevant environmental and land acquisition legislation and operational guidelines, likely environmental and social issues due to potential activities under the project, strategies and measures to minimize or mitigate these issues, necessary institutional arrangements and mechanisms for monitoring and evaluation to be taken into consideration for integration of environmental and social aspects into the project design and implementation. Adhering to the principles and procedures and using the checklist of potential environmental and social issues laid out in this ESMF will help the implementing agencies to ensure compliance with the World Bank's environmental and social safeguard policies and the relevant provisions under the related policies of the participating countries, and associated rules, regulations and procedures. This ESMF will also serve as the guideline for the staff designated by the implementing agencies to oversee and monitor the environmental and social safeguards compliance of the respective project components coming under their implementation responsibility. Therefore this ESMF must be used as the template and guideline to ensure diligent environmental and social compliance of the planning and implementation of the activities envisaged under the SRCWPP.

Although project as a whole is geared towards better environmental and social management, on the basis that the project will develop various facilities within protected areas, the project is classified as Category "B".

The objective of the ESMF is to ensure that activities under the proposed operations will address the following issues:

- Minimize potential negative environmental and social impacts as a result of either individual subprojects or their cumulative effects;
- Enhance positive environmental and social outcomes;
- Provide a mechanism for consultation and disclosure of information;
- Ensure that environmental and related social issues are thoroughly evaluated and necessary interventions are incorporated in planning, decision making, and implementation of project activities ;

- Protect environmentally sensitive areas from additional disturbance from project interventions;
- Protect human health and rights of people if affected; and
- Ensure compliance and due diligence with World Bank environmental and social safeguard policies as well as with related Government policies, regulation, guidelines and procedures as applicable to the type of project activities financed by the project.

All processes described in the ESMF can be adjusted based on implementation experience. The ESMF will be a living document and will be reviewed and updated periodically as needed.

## 2. DESCRIPTION OF THE PROJECT

### 2.1 Project Development Objective

The long-term vision of the regional program is to stabilize and, if possible, increase the population and habitats of critically endangered animals in South Asia. Since wildlife and habitats cross administrative boundaries and because knowledge and capacity vary widely across and within countries, a regional approach is needed to address cross-border issues, build synergies, share skills, knowledge and experiences and build regional collaboration for the conservation of critical habitats and ecosystems. The proposed project sits squarely in GTI's framework and introduces mitigation measures for a regional public bad – illegal wildlife trade.

The project development objective (PDO) is **to assist the participating governments to build or enhance shared capacity, institutions, knowledge and incentives to collaborate in tackling illegal wildlife trade and other select regional conservation threats to habitats in border areas**. The project will focus on a selected set of country-specific initiatives as well as key mutually agreed regional activities that are crucial to attaining the regional strategic goals.

### 2.2 Project Descriptions

#### 2.2.1 Landscape approach for regional cooperation in wildlife conservation and protection

The project would apply a two-pronged approach: (i) capacity building to address the illegal wildlife trade through regional cooperation; and (ii) habitat protection and management to generate regional conservation benefits by ensuring the conservation of endangered and flagship species such as the tiger, snow leopard, rhinoceros, elephant, Himalayan black bear, pigmy hog and red panda in increasingly fragmented habitats and addressing the human-wildlife conflict. The interventions would enhance the capacity of the Wildlife Conservation Division (WCD) of the Department of Forests and Park Services (DoFPS) in Bhutan to carry out conservation based on a landscape approach and also to address wildlife trafficking. The landscape approach would lead to improved management of the protected areas (PAs) and Government Reserve Forests (GRFs) – that are essential to the long-term conservation of the tiger and other charismatic flagship and endangered species – and would control against the adverse impacts of the illegal trade. While Bhutan is a world leader in attempting to use corridors to create a durable network of PAs, 11 years after the corridors were declared they are yet to become fully operational conservation corridors on the ground. Since flagship species require vast contiguous habitats for effective, long-term conservation, operationalizing these corridors to ensure landscape level connectivity is essential for the survival of flagship species such as the tiger, rhinoceros, snow leopard and elephant. It is critical that flagship species are managed effectively not only in the designated PAs within Bhutan but also by ensuring connectivity of ecosystems that cross national boundaries. Conservation of Asia's flagship species would lead to improved natural habitats for *all species* and, ultimately, healthy ecosystems for South and South East Asia.

Capacity building of WCD of DoFPS has been supported by The Paul Getty Foundation (US\$ 8 million), MacArthur Foundation (US\$ 1.5 million), the Bhutan Trust Fund (US\$ 0.3 million) and DANIDA (US\$ ~0.7 million). Support has included establishment of graduate training institute for sustainable natural resources management and biodiversity conservation, upgrade knowledge and skills of existing staff, increase in trained manpower in natural resources management and research. WWF has contributed US\$ ~ 150,000 for tiger monitoring, anti-poaching and trade-related activities, and capacity building in

DoFNPS. WWF proposes to provide matching funds to the US\$ 4 million GEF 5 proposal. UNDP/GEF has contributed US\$ ~ 116,000 for conflict mitigation and anti-poaching, trade activities. Therefore, unlike in the countries participating in APL I where implementation of specific project components would be carried out in a sequential manner—capacity building initially and subsequent investments in conservation—the Bhutan program would be eligible for investing in conservation activities from project effectiveness as capacity building of WCD is an ongoing activity.

This program is Phase II of a horizontal adaptable program loan (APL). Two countries – Bangladesh and Nepal – are participating in the first phase of the APL. Laos and Vietnam may join at a subsequent phase. As a regional leader in conservation, the Government of India’s decision to increase resources for PA management and wildlife protection has energized the collaboration among South Asian countries around conservation. India may participate in the project in the future and, if it does, there would be no investments funded by IDA in the country’s PAs and other wildlife habitats.<sup>15</sup> At a meeting in November 2010 among conservation officials from Bangladesh, Bhutan, India and Nepal – as the main project stakeholders – the participants discussed the project’s regional issues and agreed to adopt specific mechanisms for collaboration in addressing the threats to wildlife and habitats. The participating officials from India have committed to join the proposed Regional Policy Steering Committee (one of the project’s regional governance bodies) aimed at ensuring regional coordination as soon as the Committee is established.

## **2.2.2 Project components**

### **Component 1: Capacity building for addressing the illegal trans-boundary wildlife trade (US\$ 95,000)**

Component 1 aims to bring about regional harmonization and collaboration in combating wildlife crime through strengthened legislative and regulatory frameworks, well-equipped specialized agencies and systems, as well as relevant training and awareness programs for staff across the range of agencies that contribute to the enforcement of wildlife laws and regulations. Since capacity building of WCD of DoFNP is supported by other donor agencies and programs, this component will rely largely on the capacity developed under these programs. It is anticipated that the activities collectively would generate well coordinated frameworks, systems, technology, infrastructure and expertise in Bhutan so that conservation agencies of countries participating in this project will be at compatible or near compatible levels.

*Sub-component 1.1 Institutional strengthening in wildlife conservation and illegal wildlife trade control* (approximately US\$ 85,500) would support the establishment of an information/intelligence network that will contribute towards strengthening enforcement and control of illegal wildlife trade. This activity will complement the on-going and proposed capacity building programs supported by grants from other development partners and will jointly result in strengthening WCD in more effective wildlife conservation and illegal wildlife trade control.

*Sub-component 1.2 Staff capacity building and training toward regional collaboration* (about US\$ 9,500) would support: (i) training and workshops for field staff of WCD in strengthened enforcement; and (ii) improving trans-boundary coordination. These activities will benefit from TRAFFIC’s recommendations of new ways to enhance the ability to combat illegal wildlife trade and strengthen conservation and PA

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<sup>15</sup> This acknowledges the views of a few prominent conservationists in India who have publicly objected to IDA’s engagement in PA management in India.

management.<sup>16</sup> TRAFFIC's mission is to deliver innovative and practical conservation solutions and it develops and organizes training and other capacity-building initiatives for officials involved in the regulation of wildlife trade.

## **Component 2: Promoting wildlife conservation in Asia (US\$ 2.042 million)**

*Sub-component 2.1: Virtual Regional Center of Excellence (VRCE) for wildlife conservation* (about US\$ 14,250) seeks to fill crucial knowledge and information gaps in addressing the many regional threats to conservation. It entails the creation of the VRCE that would include a network of scientists and practitioners in wildlife conservation whose mission would be to expand the scope and quality of research in wildlife conservation needed to develop a common response against illegal wildlife trade in and outside the region and to address other regional conservation and landscape level issues to be agreed by the participating countries.<sup>17</sup> Specifically, this sub-component would support the provision of basic operations costs, equipments needs for Bhutan's participation and payments for proposal review committee members.

VRCE would provide the first (and only) coordinated, institutional response for research and knowledge dissemination on wildlife conservation in South Asia with possible links to analogous efforts in East Asia.<sup>18</sup> The exclusive focus will be on either promoting a conservation-related regional public good or addressing a regional public bad. Given the existence of national institutions with expertise in this area already, it is critical for VRCE to bring value-added and not duplicate existing efforts. By playing the role of coordinator and facilitator of knowledge and expertise, VRCE could become a vehicle for promoting dialogue and good practices as well as disseminating knowledge. Because the center will be virtual and will have no central physical facility, it will rely heavily on state-of-the-art information and telecommunication technology (ICT) to conduct its business and to attain its objectives. A Regional Operational Steering Committee (ROSC) would assist in the development of VRCE's overall program and objectives.<sup>19</sup>

VRCE would build on existing regional and global environmental initiatives and benefit from established experience, mechanisms and protocols. It would draw on strategic partnerships with renowned wildlife conservation institutions in the region and elsewhere. It would develop an active *knowledge dissemination program* that would include: (i) publication of research and pilot project results; (ii) sponsorship of workshops, lectures and seminars; (iii) special seminars aimed at decision makers in the participating governments (legislators, administrators and policy makers); (iv) training modules and teaching materials for wildlife managers; and (v) development of protocols for informing policy and wildlife managers in the field.

*Sub-component 2.2: Protected Area (PA) and Government Reserve Forest (GRF) management with regional conservation benefits*<sup>20</sup> (about US\$ 2.028 million). Bhutan, like the other countries participating

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<sup>16</sup> These may include establishing a focal point within each agency or national multi-agency task forces as well as conducting cross-country, multiple agency training to bolster intra-agency cooperation. ICCWC may be able to contribute to the implementation of this sub-component.

<sup>17</sup> Knowledge generation and research within the VRCE would focus primarily on conservation and species management research. Better management of PAs, species and stronger conservation would enable the establishment and maintenance of systems and mechanisms to address the threats to wildlife due to poaching and illegal trade.

<sup>18</sup> Laos and Vietnam may join the VRCE at a later stage. Connection to other knowledge hubs and centers of excellence in Southeast Asia and Africa may be established through the relevant partnership mechanisms under the Global Tiger Recovery Program and the South-South Experience Exchange Program, respectively.

<sup>19</sup> VRCE would be managed by a director and this position is envisaged to rotate among the participating countries to assure appropriate ownership and representation.

<sup>20</sup> The use of the term "Protected Areas" will be deemed to include PAs and GRFs when used in this document.



in APL I recognize that conservation of wildlife resources, in general, and of charismatic flagship species, in particular, would not succeed without prudent investments in PAs and GRFs aimed at ensuring a haven for wildlife. Hence, this sub-component would support the establishment and operation of two competitive funding windows: (i) for the conservation, protection and management of PAs and GRFs with regional conservation benefits; and (ii) innovative pilot projects in wildlife conservation with regional dimensions. Activities supported under these two funding windows will complement other conservation efforts supported by development partners, international conservation NGOs and the Royal Government of Bhutan (RGOB).

Window 1 of Sub-component 2.2 would support activities that would promote conservation, protection and management of PAs and GRFs. Since RGOB has made a policy decision to utilize only grant funds for pure conservation investments, the main focus of activities supported under Window 2.2 will be investments to strengthen protection and management of PAs and GRFs. Therefore, priority will be given to activities such as: (i) development of protected area management offices; (ii) wildlife rescue centers; and (iii) information and visitor centers. Activities such as habitat management, species monitoring and endangered species recovery plans etc., will be supported through grant funds outside the framework of this project. Collectively, this component will enhance the ability of WCD to more effectively engage in conservation, protection and management of the protected area network in Bhutan.

Window 2 would support innovative pilot projects which would contribute towards more effective conservation at the national and regional levels. Activities supported under this window include: (i) pilot programs in human wildlife conflict management models with financial and other incentives to encourage human wildlife coexistence; (ii) identification and development of ecotourism opportunities, camping sites, nature trails, canopy walks etc.; (iii) pilot programs in greening infrastructure in and around protected areas and GRFs in order to enhance the conservation status of sensitive ecosystems; and (iv) pilot programs in conservation of endangered flagship species.

A competitive, demand-driven approach to reward innovation and efficiency of the managers of the PAs and GRFs would be applied in selecting the activities that would receive support under Windows 1 and 2. A transparent review and approval process for both windows will be developed and implemented. The eligibility criteria (including a negative list of activities) will be specified in the operational manuals that will be finalized prior to disbursement for Windows 1 and 2.

Lessons from ADB and other donor-funded wildlife projects in South and East Asia demonstrate that partnerships between public conservation agencies with NGOs (such as WWF, WCS, IUCN, etc.) and local communities are integral to the success of pilot models but the sustainability of the initiatives relies on the leadership of the public conservation agencies. To that end, the project would promote partnerships between NGOs or local communities and the managers of PAs and GRFs but the submission of proposals will be led by WCD. Access to Window 2 funds may be secured *indirectly* by NGOs and communities through their partnerships with WCD in preparing and carrying out activities as part of projects supported by Window 2.

Since the precise PAs and GRFs as conservation landscapes would be identified during the preparation of the funding proposals, more focused consultations with those communities that may be affected by the proposed investments as well as site-specific environmental and social assessments would be undertaken when Component 2.2 is underway. However, WCD has prepared an environmental and social management framework consisting of assessments of generic environmental and social issues that may arise during implementation and of mitigation measures as well as guidance for future site-specific environmental and social assessments.

### **Component 3: Project coordination and communication**

Component 3 would focus on project coordination and communications. Since project coordination and implementation will be undertaken by regular staff of WCD, supported by DoFNP and the Ministry of Agriculture and Forests (MoAF) all costs for project coordination and operation will be a part of RGOB contribution and no project funds will be used for this purpose.

The project will adopt a multi-pronged approach to communications in order to meet regional and local challenges. The project will rely on the regular communications mechanism within WCD and MoFNP to meet the communication needs of the project. A wide range of consultations with various stakeholder groups will be conducted at the national and local levels. It is expected that rolling consultations will continue throughout the project cycle. The communications sub-component – that is being developed and implemented in collaboration with the World Bank’s external relations specialists – will harmonize with GTI in view of the latter’s broader geographic mandate to engage in demand side management.

### **3. RELEVANT SAFEGUARDS POLICIES AND REGULATIONS**

While the World Bank has started piloting the use country environmental safeguards systems in Bhutan or selected projects, due to inadequate time to conduct a safeguard diagnostic review, a decision was made that this project will continue to use World Bank safeguards requirements but with due recognition of the strong Bhutanese systems that are applicable for the project.

#### **3.1 Royal Government of Bhutan's Applicable Policies and Regulations**

##### **3.1.1 Constitution of the Kingdom of Bhutan (2008)**

Bhutan's Constitution has incorporated environmental conservation in its Article 5. The constitution states that every Bhutanese is a trustee of the Kingdom's natural resources and environment for the benefit of the present and future generations. It requires RGOB to: a) protect, conserve and improve the pristine environment and safeguard the biodiversity of the country; (b) prevent pollution and ecological degradation; (c) secure ecologically balanced sustainable development while promoting justifiable economic and social development; and (d) ensure a safe and healthy environment. The Constitution requires RGOB to ensure that a minimum of sixty percent of Bhutan's total land be maintained under forest cover for all time. Parliament is empowered to enact environmental legislation and to declare any part of the country to be a National Park, Wildlife Reserve, Nature Reserve, Protected Forest, Biosphere Reserve, Critical Watershed and such other categories meriting protection.

##### **3.1.2 Bhutan 2020**

In the last two decades, "Gross National Happiness" - underscoring that economic, spiritual, and environmental well-being are all equally important – has remained the guiding principle of Bhutanese in pursuing national development efforts. Bhutan 2020 provides 20-year perspective of development goals and objectives: environmental conservation is one of the five main development objectives included in the perspective plan.

##### **3.1.3 National Environment Strategy (1998)**

The National Environment Strategy "the Middle Path" is the policy document for the environment sector. It enshrines the concept of sustainable development and identifies 3 main avenues for such development: (a) hydropower development based on integrated watershed management; (b) agriculture development on sustainable practices, (c) industrial development based on effective pollution control measures and environmental legislation. The strategy also examines several areas of special importance for environmentally and culturally responsive economic development, including tourism, roads, urbanization, natural resources management, environmental impact assessment etc. The strategy identifies key cross-sectoral needs that the country must effectively address to integrate environmental consideration into economic development planning and policy making: information systems and research; institutional development and popular participation; policies and legislation; training and education; and monitoring, evaluation and enforcement.

##### **3.1.4 National Environmental Protection Act of Bhutan, 2007**

National Environmental Protection Act (NEPA) provides an umbrella framework for all environmental legislation in Bhutan. NEPA establishes principles applicable to environmental protection; constitution, functions and powers of authorities; protection of environmental quality; protection of forest, biodiversity and ecosystem; environmental financing and incentives; right to environmental information and citizens' participation as well as procedures for inspections and verification; enforcement, offences and penalties.

### **3.1.5 Environmental Assessment Act (2000)**

The Environmental Assessment Act (EAA) establishes procedures for the assessment of potential effects on the environment from strategic plan, policies, programs, and projects; and for the determination of policies and measures to reduce potential adverse effects and to promote environmental benefits. The Act makes Environmental Clearance (EC) from Competent Authority a pre-requisite for a project, and EC set out environmental terms for the project (article 8, 9 and 10). The Act also requires the RGOB to ensure that environmental concerns are fully taken into account when formulating, renewing, modifying, and implementing any policy, plan, or program as per regulation that may be adopted within EAA provisions. The Act outlines: general procedures for environmental assessment including assessment steps, requirements for EC issuance, consultation; information disclosure; functions and powers of the agencies charged with implementing EAA; monitoring and control of offenses and penalties; and appeals and dispute resolution procedures under EAA. Regulations and guidelines supporting the EA Act include the Regulation for the Environmental Clearance of Projects, Regulation on strategic Environmental Assessment, Application for Environmental Clearance Guidelines, and Environmental Codes of Practices.

### **3.1.6 Regulation for Environmental Clearance of Projects (RECOP)**

To implement the Environmental Assessment Act 2000, regulations were promulgated in 2002 for the environmental clearance of projects and for strategic environmental assessment. The RECOP define responsibilities and procedures for the implementation of the Environmental Assessment Act 2000 concerning the issuance and enforcement of EC for individual projects and to:

- Provide meaningful opportunities for public review of potential environmental impacts of projects;
- Ensure that all projects are implemented in line with the sustainable development policy of the RGOB;
- Ensure that all foreseeable impacts on the environment, including cumulative effects, are fully considered prior to any irrevocable commitments of resources or funds;
- Ensure that all feasible alternatives are fully considered; ensure that all feasible means to avoid or mitigate damage to the environment are implemented;
- Encourage the use of renewable resources, clean technologies and methods; ensure that concerned people benefit from projects in terms of social facilities;
- Help strengthen local institutions in environmental decision making; and
- Create a uniform, comprehensive data base on the environmental and cultural conditions and assets in the country.

### **3.1.7 Environmental Monitoring**

Environmental monitoring is referenced in the EAA wherein National Environmental Commission (NEC) is given the authority under Article 34.2 to “monitor and control compliance with the terms of environmental clearances.” NECS is directed under Article 35.4 to issue regulations and guidelines concerning “monitoring and controlling compliance.” The Competent Authority (CA) is authorized under Article 39.3 to “monitor, control and enforce the terms of the environmental clearance attached to development consents, including ordering sanctions and compensation for environmental damage.” This monitoring authority gives the CA and/or NECS the right to enter project sites with or without prior notification in order to ensure compliance with the terms of an EC, the make visual inspections and spot

checks, interview employees, occupants or other persons on site, collect samples, inspect and take copies of relevant data or documents and take all other measures necessary to the control of the environment. The respective roles of CAs, NEC and NECS with respect to persistent non-compliance with environmental conditions as well as penalties for non-compliance, appeals and dispute resolution are set forth in Articles 40-43 and Articles 49-62 of the EAA. The allocation of responsibility between NECS and the CA for the conduct of compliance monitoring of projects is delineated in the RECP, along with detailed instructions on compliance orders, appeals, legal challenges, sanctions and compensation.

Environment-related provisions of the laws governing the authorities of district (Dzongkhag) and block (Geog) level Development Committees are provided in the Dzongkhag Yarge Tshogdu (DYT) and Geog Yarge Tshogchung (GYT) Acts of 2002, respectively, which give the DYT and GYTs the power and function to adopt procedures and rules to implement national laws and enforce national regulations on a broad range of activities relating to the construction of roads, such as extraction and conservation of forests; mining and quarrying; designation and protection of monuments and sites of cultural and historical interest; designation and protection of areas of special scenic beauty or biodiversity; parks and sanctuaries; control of noise pollution; conservation and protection of water resources, lakes, springs, streams, and rivers; community forests; prevention of illegal encroachments on land and forests; prevention of construction of structures, whether on national, communal or private lands within 50 feet of highways falling in local area; and protection and preservation of sacred sites that are not part of custody of a monastic body or central agencies.

#### ***Environment-related provisions in DYT Chathrim, 2002***

Article 8 of the DYT Chathrim 2002 gives the DYT the power and function to:

- promote awareness and dissemination of national objectives (section 3);
- adopt procedures and rules to implement national laws, wherever relevant (section 10); and
- make recommendations on activities with major environmental impacts such as construction of roads, extraction and conservation of forests, mining and quarrying (section 13).

Article 9 of the DYT Chathrim 2002 gives the DYT the power and function to adopt and enforce regulations with respect to:

- designation and protection of monuments and sites of cultural and historical interests (section 1);
- designation and protection of areas of special scenic beauty or biodiversity as dzongkhag parks and sanctuaries (section 2);
- control of noise pollution (section 8);
- establishment of quarries and mines in accordance with Mines and Mineral Management Act 1995; and
- protection of public health as per prevailing national guidelines or acts (section 14).

Article 10 of the DYT Chathrim, 2002, gives the DYT broad administrative power and function to give direction and approval on:

- construction of farm and feeder roads (section 5);
- forest management plan including extraction, conservation and forest road construction in accordance with the FNCA (section 8);
- protection of forests, tsamdo and all types of government and community lands from illegal house and similar construction and other encroachments (section 19);
- control of construction of structures, whether on national, communal or private lands, within 50 feet of highways, including enforcement of measures such as cessation of construction and demolition of the structures (section 20);
- choice of trekking routes and camps for tourists (section 22); and
- mobilization of voluntary actions in times of natural catastrophes and emergencies (section 26).

Article 13 of the DYT Chathrim 2002 gives the Dzongkhag Administration the powers and functions to:

- construct farm and feeder roads, in conjunction with the NEC (section 5);
- determine the choice of design, construction methods and building materials for forms, which do not have to follow standard designs in conformity with acceptable technical and structural norms (section 12); and
- approve allocation of timber permits as per the rules and regulations issued by the MoA from time to time (section 16).

### ***Environment-related provisions in GYT Chathrim, 2002***

Article 8 of the GYT Chathrim 2002 gives the GYT the power and function to adopt and enforce regulations at the geog level with respect to:

- safe disposal of waste (section 1);
- control and prevention of pollution of air, soil and water (section 2);
- sanitation standards (section 3);
- control of communicable livestock diseases within the geog in accordance with the Livestock Act 2001 (section 4);
- allocation of safe and clean drinking water from water supply schemes (section 5);
- allocation of irrigation water, in accordance with the provision of the Land Act 1979 (section 6); and
- protection and harvesting of edible forest products in the local area in accordance with the Forest and Nature Conservation Act 1995 (section 8).

Article 9 of the GYT Chathrim, 2002, gives the GYT broad administrative power and function at the geog level with respect to:

- administration, monitoring and review of all activities that are part of the geog plan, including the maintenance of community properties such as lhakhangs (temples), goendeys (monastic institutions) and their nangtens (religious treasures), chhoerten (stupa), mani dangrem (prayer structures), water supply schemes, irrigation channels, footpaths, mule tracks, farm and feeder roads, suspension and cantilever bridges, micro-hydel, basic health units and outreach clinics, lower secondary school and community schools, and extension centers of the RNR sector (section 2);
- conservation and protection of water resources, lakes, springs, streams, and rivers (section 7);
- custody and care of communal lands, community forests, including sokshing and nyekhor tsamdo, medicinal herbs and accordingly prevention of illegal house construction and all other types of encroachments on land and forests (section 8);
- prevention of construction of structures, whether on national, communal or private lands, within 50 feet of highways falling in local area (section 9); and
- protection and preservation of ney (sacred natural site), nyekhang (dwelling place of local deity) or yulha and zhiday, which are not part of custody of a monastic body or central agencies (section 10).

### **3.1.8 Forest and Nature Conservation Act, 1995**

The Forest and Nature Conservation Act (FNCA) was enacted in 1995 in keeping with evolving conservation needs and allowing for community stewardship of forest resources. The objective of the Act is to “provide for the protection and sustainable use of forests, wildlife and related natural resources of Bhutan for the benefit of present and future generations.” It covers forest management, prohibitions and concessions in government-reserved forests, forestry leases, social and community forestry, transport and trade of forestry produce, protected areas, wildlife conservation, soil and water conservation, and forest fire prevention. Bhutan’s National Forest Policy places priority on conservation of forests and associated resources for their ecological functions. Economic benefit from forest resources is considered secondary and is to be derived within sustainable limits. Bhutan’s Renewable Natural Resources Policy emphasizes

people-centered economic development that has prospects for long-term sustainability, balanced and equitable development of the country's renewable natural resources and distribution of benefits, and development strategies that are environmentally friendly and ensure the integrity of the country's fragile ecosystem. To support the implementation of the Forest and Nature Conservation Act 1995, the Ministry of Agriculture promulgated the Forest and Nature Conservation Rules 2000. The Rules establish regulations for forest management, private and community forestry, establishment and management of protected areas, wildlife protection, and prevention of forest fires, land clearance, and other activities potentially impacting soil, water and wildlife resources, among other things.

### **3.1.9 Forest Policy**

Over the last few decades, the RGOB has come to recognize that, if its forest estate is to be kept from deteriorating similarly to some of its neighbors, a systematic forest management program must be put in place. This would have to be based on a balance of conservation and economic development goals through long-term, sustainable, multi-purpose forest management. The 1974 Forest Policy envisages that 60 percent of the land area should be under forest cover and recognizes the need for forest demarcation and inventory and preparation of management plans. The 1979 Forest Policy Statement was more conservative in its approach to utilizing forest resources and restricted logging by commercial operators. Evidence of the RGOB determination to develop a firm policy and strategy for the future is reflected in its issuance of the Forest Policy Statement of 1991, Decentralization and Privatization Policy, Wood Pricing and Marketing Policy, Social Forestry Rules 1990, Forest and Nature Conservation Act 1995, and Forest and Nature Conservation Rules 2006.

Within the Forest Policy Statement 1991 guidelines, there is the following General Principles for Biodiversity Conservation in Forest Management in Bhutan:

- National forest policy and planning should recognize biodiversity conservation as a major development goal;
- A national system of protected areas should be established that is representative of all ecological zones and types, and protect areas of high biodiversity;
- Protected areas should be linked by corridors of natural forest and surrounded by buffer zones;
- The greatest proportion of the country's natural forest areas should be dedicated to multi-use, multi-purpose management where biodiversity conservation is one of the major management objectives;
- Riparian areas should be reserved, accorded special management status and incorporated into a network of continuously-connected biodiversity reserves within working forest providing both horizontal and vertical ecological linkages through the landscape;
- Silvicultural systems should conserve biodiversity composition, structure and function, and, thus, be based as closely as possible on natural ecosystem disturbance patterns;
- In order to retain the full range of natural forest age classes, portions of the working forest should be managed under very long felling cycles, while others should be reserved in perpetuity and incorporated into the ecological network
- The distribution of logged and unlogged areas should be managed to maintain ecological corridors and prevent ecological fragmentation;
- Within felling coupes, "keystone" biodiversity assets with important ecological functions, such as wildlife food and habitat trees, snags and coarse woody debris, should be retained in both harvesting and stand tending operations; and
- Biodiversity status of forest management areas should be assessed at regular intervals (5-10 years) through comprehensive surveys and between these major censuses there should be annual monitoring of easily identifiable indicator species.

### **3.1.10 Forest and Nature Conservation Rules, 2006**

To support the implementation of the FNCA and in accordance with the powers and duties conferred under the FNCA, the MoAF promulgated Forest and Nature Conservation Rules 2000 (FNCR). The FNCR provides regulations for:

- preparation, review, approval, implementation, monitoring and evaluation of forest management plans;
- reservation of government reserved forests, allotment of land and land rights in government reserved forests, regulation of activities in lands allotted for private use, collection of forest produce from government reserved forests, compensation for acquired lands, prohibitions, restrictions and concessions in government reserved forests, and forestry lease;
- creation of private and community forests, including procedures for registration of private and community forests and effects consequent upon registration, management and use of community forest resources, and responsibilities and powers of the community forest management group and concerned government agencies;
- transport and trade of forest produce, including extraction and marketing procedures and inspection of forest produce in transit or in trade; declaration of protected areas, administration of PAs, and prohibitions in PAs;
- protection of wildlife and use of certain wild species;
- prevention of forest fires, land clearance, and activities potentially impacting soil, water and wildlife resources; and
- enforcement and penalties for offences related to all of the above.

### **3.1.11 Biodiversity Act of Bhutan, 2003**

The Act asserts the sovereignty of the country over its genetic resources, the need to promote conservation and sustainable use of biodiversity resources as well as equitable sharing of benefits arising from sustainable use, and the need to protect local people's knowledge and interests related to biodiversity. It lays down the conditions for the grant of access, benefit sharing, and protection, and describes various rights, offences and penalties.

### **3.1.12 Land Act, 2007**

The 87<sup>th</sup> session of the National Assembly in 2007 passed the Bhutan Land Act 2007. The purpose of the Act is to manage, regulate and administer the ownership and use of land for socio-economic development and environmental well-being of the country, This will be done through efficient and effective land administration, security of land tenure, equal opportunity to land, facilitation of land markets, and effective use of land resources and conservation of ecosystems. The Land Act came into force on 2008 and has brought more dynamism into land administration and land transaction. The salient features of the Act are:

- The landmark change of the Act was the establishment of an autonomous National Land Commission (NLC) for land administration. According to the Act, the function of NLC is to lay down policies, programmes, regulations and guidelines in accordance with the Act. The NLC is empowered to acquire land, allot substitute land and approve compensation.
- Under the Act, any land transaction taking place within the municipality will be approved by the National Land Commission Secretariat. Land owners need not go to court to transfer the *thram*. It can now be done at the local level.
- Land categories have been reduced from more than 20 categories in the 1979 Land Act to seven categories in the Land Act 2007. These categories are *Chhuzhing* (wetland), *Kamzhing* (dry land)



including orchards, *Khimsa* (residential land), industrial land, commercial land, recreational and institutional land.

- Power over land management has also been streamlined and decentralized to local authorities. The local bodies are empowered to resolve land disputes, endorse land transactions and conversion of land categories.
- The Act also recognizes the common disputes among landowners because of unclear land boundaries. The Act says that before establishing any structure that is likely to affect the boundary of land, the landowner planning to construct a new structure would have to verify and ascertain the boundary of the land with the landowner of the adjoining land and local land record office.
- A landowner owning an independent *thram* would have the exclusive right to transact his/her land including the surrounding of the land to the government. A piece of land registered in a joint ownership would, however, be transacted upon consent of all the landowners and co-owners to the extent of his/her share of *thram*, if specified in the *thram*.
- The Act empowers the government to acquire a registered land for public interest, but the government would have to provide substitute land or cash payment or both as compensation. Landowners would have the option to choose land or cash compensation in rural areas.
- The government institutions may acquire private registered land for public purposes. Physical possession of land acquired will only be taken after the substitute land has been registered, and acquiring agency has paid cash compensation.
- The revised Land Act also tries to provide equal opportunity to land through progressive land tax and leasing of government land.

### **3.2 World Bank Operational Policies and Procedures Applicable to the Project**

World Bank policies and guidelines, pertaining to environmental and social safeguards that may require consideration under this project are as follows:

- OP/BP/GP 4.01 Environmental Assessment
- OP/BP/GP 4.04 Natural Habitats
- OP/BP/GP 4.12 Involuntary Resettlement

The main environmental safeguard policy to be triggered under this project will be OP/BP/GP 4.01 on Environmental Assessment. The other environmental safeguard policy namely, OP/BP/GP 4.04 on natural habitats has been identified and will be considered to ensure minimal adverse environmental impacts due to the project. Application of social safeguards policies includes OP/BP/GP 4.12 on Involuntary Resettlement.

#### **3.2.1 Compliance with OP 4.01 – Environmental Assessment**

Strengthening Regional Cooperation for Wildlife Protection Project has been classified as a Safeguards **Category B**. Although project activities are expected to be environmentally beneficial in the long-term, implementation of certain activities will have the potential to trigger environmental impacts which are not irreversible and are likely to be localized and can be easily mitigated. Since the project will operate in areas of high ecological sensitivity and vulnerability, great care will be taken to address environmental issues at the earliest stage possible in order to minimize their potential impacts.

This means that (a) all activities that fall under the prescribed categories stipulated in the national laws of RGOB, environmental assessments will be done according to local regulations particularly, Environmental Assessment Act, 2000 and Regulation for the Environmental Clearance of Projects, 2002 and applicable World Bank environmental safeguard; and (b) all other sub-projects that do not require screening according to national regulations but where World Bank environmental safeguard policies are applicable and/or having some level of environmental impacts will be screened using appropriate methodology (as proposed in this framework), depending on the nature and scale of potential impacts, and mitigated. The RGOB is responsible for carrying out the EA/EMPs and for implementing the necessary safeguards.

### **3.2.2 Compliance with OP 4.01 Annex C Environmental Action Plans (or Environmental Management Plans)**

According to Annex C of the World Bank OP 4.01 an Environmental Management Plan (EMP) is a recommended element of EA reports for Category B projects. The EMP should consist of a set of mitigation, management, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan should also include the actions needed to implement these measures. In preparation of an EMP, the EA consultant should:

- (a) Identify the set of responses to potentially adverse impacts;
- (b) Determine requirements for ensuring that those responses are made effectively and in a timely manner
- (c) Describe the means for meeting those requirements.

More specifically, the EMP should include the following components:

- The EMP should identify feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient.
- The EMP should define monitoring objectives and specify the type of monitoring needed, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP.
- To strengthen the project sponsor's environmental management capability, EMPs should mention any technical assistance that may be needed by the borrower.
- For all three aspects (mitigation, monitoring, and capacity development), the EMP should provide (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP.
- The EMP must be integrated into the project's overall planning, design, budget, and implementation.

During project implementation, the project sponsor should report on compliance with:

- (a) Measures agreed with World Bank on the basis of the findings and results of the EA, including implementation of any EMP, as set out in the project documents
- (b) The status of mitigatory measures; and

(c) The findings of monitoring programs.

### **3.2.3 Compliance with OP 4.04 Natural Habitats**

The World Bank's Operational Policy 4.04 recognizes that conservation of natural habitats and other measures that protect and enhance the environment is essential for long-term sustainable development. The Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. The Bank does not support projects that, involve significant conversion or degradation of critical natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs. In projects with natural habitat components, project preparation, appraisal, and supervision arrangements include appropriate environmental expertise to ensure adequate design and implementation of mitigation measures. The Bank expects the borrower to take into account the views, roles, and rights of groups, including local nongovernmental organizations and local communities, affected by Bank-financed projects involving natural habitats, and to involve such people in planning, designing, implementing, monitoring, and evaluating such projects. Involvement may include identifying appropriate conservation measures, managing protected areas and other natural habitats, and monitoring and evaluating specific projects. The Bank encourages governments to provide such people with appropriate information and incentives to protect natural habitats.

The proposed project's objective is similar to that of OP 4.04 where the project will not entail any conversion or degradation of natural habitats and it is highly unlikely that the policy will be triggered in its full force as the project will not directly affect natural areas in an adverse way. However, some sub-project activities inside natural areas, such as development of tourism facilities and infrastructure for conservation purposes inside PAs, may have some degree of negative bearing on the functions of natural areas and hence as a precautionary measure the protective measures recommended by this policy have been considered. Also, Forest and Nature Conservation Act, 1995, Forest and Nature Conservation Rules, 2006, Forest Policy, 1974 and 1979 and Biodiversity Act, 2003 of Bhutan makes it mandatory to address issues in natural habitats and therefore OP 4.04 will be complied with during project implementation. Aside from EA documentation that may be required for sub-projects, there is no free-standing document that is automatically required by the trigger of OP 4.04 as it applies to the project.

### **3.2.4 Compliance with OP 4.12 Involuntary Resettlement**

The proposed project will not permit any involuntary resettlement and involuntary land acquisition. Even though involuntary land acquisition and resettlement of individuals and/or families will not take place due to project activities, ecosystem restoration and conservation planning is likely to affect land use patterns of the communities. This will have an impact on their livelihoods. Hence, OP 4.12 will be triggered, and a Resettlement Policy Framework (as part of this Framework) establishes the process by which members of potentially affected communities will be consulted and participate in design of project and mitigatory/compensation measures.

The primary objective of the World Bank policy on 'Involuntary Resettlement' is to explore all alternatives to avoid or at least minimize involuntary resettlement. Where resettlement is unavoidable, the resettlement activities should be conceived and executed as sustainable development programs, providing sufficient resources to enable affected persons to share in project benefits and assisted in their efforts to improve their livelihood and standard of living, or at least to restore them to pre-project level. The policy also requires that affected people are meaningfully consulted and should have opportunities to participate in planning and implementing the programs. The policy applies to the taking of land and other assets when involuntary resettlement results in the loss of shelter (which is not applicable for this project), the

loss of all or part of productive assets, or access to them, and the loss of income sources or means of livelihood, with or without physical displacement.

Measures required to ensure that resettlement has a positive outcome include:

- Providing Project-affected persons with options;
- Permitting their participation in planning and selecting these options;
- Prompt compensation at full replacement cost for losses;
- Choosing relocation sites that provide, at a minimum, the same benefits as the sites they replace;
- Providing allowances and other assistance to make a smooth transition after displacement;
- Identifying vulnerable groups and providing and special assistance to these groups; and,
- Implementing an institutional structure that supports the process to a successful end.

Bank's policy on Involuntary Resettlement requires income rehabilitation assistance to those affected severely due to the loss of their productive assets or loss of incomes and livelihood.

Absence of legal title does not exclude individuals from the eligibility to receive compensation and/or other assistance. The displaced or affected population eligible for compensation for losses include: those who have formal legal rights to land or other assets, and those who initially do not have formal legal rights to land or other assets but have a claim to legal rights based upon the laws of the country. The Policy also requires that those without legal title should be given assistance to meet the objectives of the policy. The genesis of these rights may come from continued possession of public land where the government has not sought their eviction. Bank's policy also recognizes that stakeholders who illegally occupy project-affected areas after established cut-off-date for any components are not eligible for compensation and other assistance provided that adequate measures are taken for information dissemination to people.

### **3.3.5 Application of OP 4.10 Indigenous Peoples**

Key objectives of the Indigenous Peoples policy are to: (i) ensure that indigenous people affected by World Bank funded projects have a voice in project design and implementation; (ii) ensure that adverse impacts on indigenous peoples are avoided, minimized or mitigated; and (iii) ensure that benefits intended for indigenous peoples are culturally appropriate. The policy is triggered when there are indigenous peoples in the project area, if there is a potential of adverse impacts on indigenous peoples, and if indigenous peoples are the intended beneficiaries. When the policy is triggered a culturally appropriate Indigenous Peoples Plan (IPP) will be prepared following meaningful consultation with the affected IPs.

In the Bhutanese context, the concept of indigenous peoples is ambiguous. People in every valley/region can be considered indigenous people, with almost every valley/region having distinct dialects. What is more relevant is the term "minor ethnic groups" although such groups in Bhutan can be socio-culturally closely associated with one of the primary ethnic groups, Ngalong, Sharchop or Lhotshampa. Also, it should be noted that in the Bhutanese context such minor ethnic groups usually form the dominant local community.

Therefore, there are no groups which can be said to be vulnerable or disadvantaged as a consequence of their ethnicity. Instead, vulnerable groups can be determined in terms of households with low cash income, small or no landholding, high ratio of dependents (young children, old parents, disabled

members), recurrent food deficit, and woman as family head due to death/ illness of husband or divorce. Such households will need special attention to ensure that they are not adversely impacted. Hence the IP policy will not be triggered. The vulnerable and disadvantaged groups will be dealt through OP 4.12.

### **3.3.6 Adequacy of National Environmental and Social Clearances of RGOB**

The composite RGOB environmental clearance processes, in principle, are consistent with World Bank environmental and public disclosure requirements. However, all activities with an impact on the environment under the proposed project will be subjected to some form of an environmental and social analysis, prior to disbursement of funds. The extent of the analyses will depend on a given activity; the site selected and will be decided in consultation with the World Bank.

The RGOB's Environmental Assessment Act, 2000 and Regulation for the Environmental Clearance of Projects, 2002 will ensure if project activities are likely impact the environment in a negative manner, necessary mitigation measures are in place.

Also, Forest and Nature Conservation Act, 1995, Forest and Nature Conservation Rules, 2006, Forest Policy, 1974 and 1979 and Biodiversity Act, 2003 of Bhutan makes it mandatory to address issues in natural habitats and therefore OP 4.04 will be complied with during project implementation.

The RGOB confirms that due to project activities communities living in forests and natural habitats will not be displaced or any land conversion activities will be promoted. Furthermore, restrictions of access to forests will not be imposed by the project. While the Forest and Nature Conservation Act, 1995 and Forest, Nature Conservation Rules, 2006 and Forest Policy, as well as the Land Act, 2007 will ensure that any impact to the land is managed within these regulations.

Although there is no legislation specifically tailored for minor ethnic groups or vulnerable groups, the country's development philosophy is based on all-inclusive, nondiscriminatory development, which is gaining further ground with the growing impetus on decentralization. The national decentralization policy is geared towards enhancing local governance and promoting broad-based participation at the local community level. While *geogs* are officially considered the smallest unit for planning and administration of development programmes, local activities and priorities emanate from the *chiog* level. Each *chiog* is represented in the GYT by its *tshogpa*. The *tshogpa* convenes *chiog* meetings to discuss and draw consensus on local activities and priorities before submitting them to the GYT. Such meetings are required to be attended by a member from each household in the *chiog*, irrespective of social or economic standing.

In conclusion, the RGOB's clearance procedure is adequate and fairly reliable for the context of this project. However, the World Bank will review safeguards documentation, as appropriately used, prepared under the project and provide necessary concurrence for the approval of disbursements of funds. Any activity defined in this framework, which does not fall within the RGOB safeguards requirements will need to develop appropriate environmental analyses and planning and will be reviewed by World Bank and provide necessary concurrence for the approval of disbursements of funds.

## **4. ENVIRONMENTAL MANAGEMENT FRAMEWORK**

The Environmental Management Framework (EMF) outlines the framework for planning, implementation and monitoring of environmental management measures required to ensure that potential adverse environmental impacts from the project activities are eliminated, offset, or reduced to an acceptable level. At the same time, it is expected that the EMF will help the project enhance environmental benefits from the project interventions. The EMF has been built on relevant existing national policies, legislations, regulations and guidelines and on WB safeguard policy requirements.

### **4.1 Environmental Management Tools**

This section describes some of the key environmental management tools that would likely to be used in this project. Based on the regulations of the RGOB and World Bank environmental safeguards policies, decisions will be made with the concurrence of the World Bank on the best tool(s) to be used for a given activity that may have environmental impacts due to its implementation.

#### **4.1.1 Environmental Screening**

The purpose of environmental screening is to minimize the resources used to assess interventions with minimal environmental implications, conserving them for the assessment of interventions having:

- Known potentially significant adverse impacts requiring additional assessment
- Potential impacts that require additional assessment to determine the level of significance
- Known management measures requiring additional development or customization
- A need to consider, conceptualize and design novel management measures

Environmental Checklists are forms containing a series of questions on environmental aspects, designed to screen potential environmental impacts of the proposed project. Environmental checklists can be used for an initial screening of impacts which is to be followed by a more detail analysis or in projects where the level of activity (as in the example of constructing a small to medium scale building in an already built up area) is not meant to cause much harm a checklist only would suffice

All project activities involving infrastructure development and changes to natural habitats including activities related to habitat management beneficial to wildlife, invasive species removal, etc. will be screened using the checklist provided in Annex 1. The responses provided to the screening checklist for a given activity will indicate the requirement of undertaking an EA or just development of an EMP or use of code of practice. However, if the RGOB law mandates EA for a subproject, screening serves no purpose and therefore will not be necessary.

#### **4.1.2 Environmental Assessment**

Environmental Assessments (EA) are effective tools for evaluating the environmental risks and opportunities of project proposals and improving the quality of outcomes. Ideally the EA should be carried out at the end of the preliminary design phase so that the impacts of each planned activity can be evaluated and alternatives can be worked out for activities that have major impacts. The outcomes of the EA should then be used to finalize the project design which should ensure that the impacts of the given project are minimal. During the sub-project preparation, for example EA can provide preliminary information about siting implications, potential impacts of alternatives, and opportunities to incorporate mitigation and enhancement measures into project concepts and designs. This will also provide the possibilities for cumulative impacts induced due to multiple activities within the same area or similar

interventions in large areas in order to provide guidance in possible replication of activities and/or avoidance of supporting certain interventions.

The importance of this management tool as means of foreseeing potential environmental impacts caused by proposed projects and its use in making projects more suitable to the environment has been highly effective. As a decision making tool, EA has its strengths and weaknesses. It plays a crucial role at the project level decision making. However, in the entire development process application of EA as a tool to bring in environmental sustainability comes fairly at a late stage. At this point, it may be too late to change certain policy decisions and the choices are limited.

In the preparation phase, the EA shall achieve the following objectives:

- To establish the environmental baseline in the study area, and to identify any significant environmental issues;
- To assess these impacts and provide for measures to address the adverse impacts by the provision of the requisite avoidance, mitigation and compensation measures;
- To integrate the environmental issues in the project planning and design;
- To develop appropriate management plans for implementing, monitoring and reporting of the environmental mitigation and enhancement measures suggested.

#### **4.1.3 Environmental Management Plan**

Certain activities will have explicit impacts on the natural environment and thus require a specific plan to institute and monitor mitigation measures and take desired actions as timely as possible. An Environmental Management Plan (EMP) must be kept as simple as possible, clearly describing adverse impacts and mitigation actions that are easy to implement. The scale of the subproject will determine the length of the EMP. A small-scale subproject's EMP can be elaborated in a few paragraphs or in tabular format, keeping it as simple as possible with concrete mitigation actions, timelines and responsible persons.

An EMP generally addresses the following:

- Mitigation, enhancement, protection and compensation measures in each project development phase including design (for infrastructure activities this involved pre-construction, construction, operation and maintenance /benefit realization, and abandonment if applicable)
- Mitigation performance monitoring (i.e. monitoring the operation and maintenance of mitigation measures and their targeted impacts)
- Beneficiary/affectee participation arrangements by project development phase
- Disaster management contingency plan where applicable
- Institutional arrangements for implementation, monitoring and reporting
- Cost estimates for all EMP activities
- Standard construction environmental safeguards clauses for interventions involving works

It is essential to involve local communities during the development of the EMP since they are likely to be the most affected parties due to the proposed development. Further, most of the local knowledge is

important in identifying, designing and planning the implementation. In addition, the success of the implementation of the EMP will depend on community support and action.

Ideally, all EIAs and IEEs which identifies adverse environmental impacts should prepare an EMP as part of the report. In World Bank funded projects, a standalone EMP is considered appropriate in situations where a detailed environmental analysis is not required (as in the case of rehabilitation of an existing jeep track within a PA). Implementation of the EMP should be regularly monitored.

### ***Guidelines for Developing EMPs***

Having identified the potential impacts of the relevant sub-component, the next step of the EA process involves the identification and development of measures aimed at eliminating, offsetting and/or reducing impacts to levels that are environmentally acceptable during implementation and operation of the project (EMP). EMPs provide an essential link between the impacts predicted and mitigation measures specified within the EA and implementation and operation activities. World Bank guidelines state that detailed EMP's are essential elements for Category A projects, but for many Category B projects, a simple EMP alone will suffice. While there are no standard formats for EMPs, it is recognized that the format needs to fit the circumstances in which the EMP is being developed and the requirements, which it is, designed to meet. EMPs should be prepared after taking into account comments from the PAA and World Bank as well as any clearance conditions. Annex C of OP 4.01 of the World Bank safeguards outlines the important elements of the EMP and guides its preparation. Given below are the important elements that constitute an EMP. Other elements as described earlier to be incorporated based on the circumstances and needs.

*a. Identification of impacts and description of mitigation measures:* Firstly, Impacts arising out of the project activities need to be clearly identified. Secondly, feasible and cost effective measures to minimize impacts to acceptable levels should be specified with reference to each impact identified. Further, it should provide details on the conditions under which the mitigatory measure should be implemented (ex; routine or in the event of contingencies) The EMP also should distinguish between type of solution proposed (structural & non structural) and the phase in which it should become operable (design, construction and/or operational).

*b. Enhancement plans:* Positive impacts or opportunities arising out of the project need to be identified during the EA process. Some of these opportunities can be further developed to draw environmental and social benefits to the local area. The EMP should identify such opportunities and develop a plan to systematically harness any such benefit.

*c. Monitoring programme:* In order to ensure that the proposed mitigatory measures have the intended results and complies with national standards and donor requirements, an environmental performance monitoring programme should be included in the EMP. The monitoring programme should give details of the following;

- Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc).
- Monitoring mechanisms and methodologies
- Monitoring frequency
- Monitoring locations

*d. Institutional arrangements:* Institutions/parties responsible for implementing mitigatory measures and for monitoring their performance should be clearly identified as well as the legal instruments that will define their obligations. Where necessary, mechanisms for institutional co-ordination should be identified as often monitoring tends to involve more than one institution.



*e. Implementing schedules:* Timing, frequency and duration of mitigation measures with links to overall implementation schedule of the project should be specified.

*f. Reporting procedures:* Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigatory measures and monitoring itself should be specified. Guidelines on the type of information wanted and the presentation of feedback information should also be highlighted.

*g. Cost estimates and sources of funds:* Implementation of mitigatory measures mentioned in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include costs estimates for each measure and also identify sources of funding.

*h. Contract clauses:* This is an important section of the EMP that would ensure recommendations carried in the EMP will be translated into action on the ground. Contract documents will need to be incorporated with clauses directly linked to the implementation of mitigatory measures. Mechanisms such as linking the payment schedules to implementation of the said clauses could be explored and implemented, as appropriate.

Consultation with affected people and NGOs in preparing the EMP is recommended for Category B projects.

#### **4.1.4 Environmental Audits**

Most of the development projects go through the EIA process and develop EMPs that are not implemented at the end which will render the entire process an exercise in futility. Therefore, monitoring of the project during the construction and implementation phase is a must to ensure environmental compliance of a project. This could be achieved through regular environmental audits.

The purpose of the environmental audit is to

- Collect, analyze and interpret monitoring results to detect changes related to implementation and operation of specific activities
- To verify the monitoring parameters are in compliance with national set standards
- To compare the predicted impacts with actual impacts and evaluate the accuracy of predictions
- To evaluate the effectiveness of implementation of the EMP
- To identify shortcomings in the EMP if any and incorporate it into the EMP if deemed necessary
- To identify and report if there is non-compliance with the EMP

The auditors must first develop a structured questionnaire based on the EMP for the purpose of conducting the audit. Then during the site visit data can be collected using this questionnaire through interview surveys of officers responsible for implementation of the EMP and site records, logs etc., The audits can be carried out at regular intervals or on a *ad hoc* basis or when mitigation is not carried out as defined by the EMP leading to public concern.

Expected outcomes of the Environment Audit are

- Ensure that EMP is implemented properly
- Ensure that the mitigation measures are effectively minimizing the identified impacts as well as identify new impacts that may have been excluded in the EMP that require mitigation. Then make

necessary adaptive changes to the EMP to ensure that the all significant impacts are effectively mitigated.

- Identify non compliance with EMP if any and provide recommendations as to how to deal with such non compliance

#### **4.1.5 Environmental Codes and Best Management Practices**

In addition to the above tools following environmental codes and best practices may be sufficient where impacts of a particular activity are very minor, easily mitigatable and can adopt generic codes/practices developed elsewhere. This phase of the APL will contribute to the development of a manual on environmental codes and best management practices that will be replicable within the project and elsewhere as the implementation progresses.

### **4.2 Preliminary Assessment of Environment, Environmental Impacts and Mitigation Measures**

#### **4.2.1 Country Environment**

**Geography:** The Kingdom of Bhutan, with a total area of 38,394 km<sup>2</sup>, is a small, landlocked, mountainous country in the Eastern Himalayan region. It is bordered by the Indian states of Arunachal Pradesh to its east, Assam and West Bengal to its south, and Sikkim to its west. The northern border is shared with the Tibetan Autonomous Region of China. Bhutan is almost entirely mountainous with nearly 95 per cent of the country being above 600 meters above sea level (masl). The terrain is rugged and steep, with altitudes declining from above 7,500 masl to under 200 masl within a short north-south distance of 170 km. The country can be divided into three broad physiographic zones: one, the southern belt consisting of the Himalayan foothills adjacent to a narrow belt of flatland (Duars) along the Indian border with altitude ranging from under 200 masl to about 2,000 masl; two, the inner Himalayas made up of the main river valleys and steep mountains with altitude ranging from about 2,000 masl to 4,000 masl; and, three, the great Himalayas in the north along the Tibetan border consisting of snow-capped peaks and alpine meadows above 4,000 masl.

**Climate:** The climate is dominated by southwestern monsoon, which originates from the Bay of Bengal. Generally, the monsoon starts from June and lasts until early September. Occasionally, during October and November post-monsoon rain occurs and can be sometimes severe. The period from November to March is usually dry, although brief showers may occur due to the westerly wind that brings winter rains in the Himalayan foothills. During April and May, pre-monsoon occurs with light showers. Mean annual rainfall varies from approximately 2,500 to 5,500 millimeters (mm) in the southern foothills, from 1,000 to 2,500 mm in the middle valleys and inner hills, and from 500 to 1,000 mm in the northern part of the country.

The country can be divided into three broad climatic zones: sub-tropical in the southern foothills; temperate in the middle valleys and inner hills; and alpine in the northern mountains. Generally, southern foothills are hot and humid during summer and cool in winter. The middle valleys and inner hills are warm in summer and cold in winter, with a pleasant spring and autumn.

**Land Use and Cover:** Forest is by far the most dominant land cover, with 72.5 per cent (including 8.1 scrub forest) of the country under forest cover – one of the highest in the Asian region. Almost all of the forests are natural, with plantation forest being just about 0.2 per cent. Agricultural land is only 7.7 per cent and the main land uses for agriculture are kamzhing (dryland cultivation), chhuzhing (wetland cultivation), tseri (slash-and-burn cultivation), and mixed cultivation. Area under horticulture is negligible but slowly expanding. Much of the northern part of the country is snow and glaciers, which accounts for

7.5 per cent of the country's land cover. Barren rocks cover 5 per cent and pastures 3.9 per cent of the country.

The country's extreme altitudinal variation has created a corresponding range of climatic conditions varying from hot and humid sub-tropical conditions in the southern foothills to cold and dry tundra conditions in the northern mountains. This is further modified by latitude, precipitation, slope gradient, and exposure to sunlight and wind, giving each valley and often opposite-facing slopes a unique set of climatic conditions. As a result of the wide variation in macro- and micro-climatic conditions, there are as many as 11 vegetation zones within the country's small geographical area.

**Watersheds:** There are four major river basins, namely Amo Chhu, Wang Chhu, Puna Tsang Chhu, and Drangme Chhu. All these river systems flow southerly through the inner Himalayas and later Duars to join the Brahmaputra river in India. The largest river basin, the Drangme Chhu, drains nearly half of the country. Its major tributaries are Kulong Chhu, Kuri Chhu, Chamkhar Chhu and Mangde Chhu. The Drangme Chhu is known as Manas in the south and in India. Puna Tsang Chhu is formed by the confluence of Mo Chhu and Pho Chhu originating from the northwestern part of the country. In the south and in India, Puna Tshang Chhu is known as Sunkosh. The Wang Chhu flows southerly through the valleys of Haa, Paro and Thimphu in west-central Bhutan and continues through the foothills before it finally drains into India. Its main tributaries are Ha Chhu, Pa Chhu and Thim Chhu. The smallest river system, the Amo Chhu, known as Torsa in the south and in India, flows swiftly through south-western Bhutan before broadening near Phuentsholing and then flowing into India. These river systems sustain hydropower development and agriculture, which are the mainstays of the Bhutanese economy. They are also of immense ecological and economic consequence to the many downstream communities in the alluvial plains of India and Bangladesh.

**Biodiversity:** The Eastern Himalayas is recognized as one of the global biodiversity hotspots. With vast areas of forests, pristine natural landscapes and outstanding biological diversity, Bhutan can be said to be the centerpiece of this hotspot and, hence, of immense global ecological significance. The country is bestowed with incredible biodiversity as a result of vast forest cover and its location at the junction of two major biogeographic realms – the tropical Indo- Malayan and the temperate Palearctic. The country's biological diversity of more than 5,400 species of vascular plants, 770 species of birds and 170 species of mammals is particularly spectacular for a country which is 80 times smaller than India and 240 times smaller than China! The country's wild fauna includes several globally threatened species such as the Bengal tiger *Panthera tigris tigris*, snow leopard *Uncia uncia*, clouded leopard *Neofelis nebulosa*, red panda *Ailurus fulgens*, Bhutan takin *Budorcas taxicolor whitei*, golden langur *Trachypithecus geei*, capped langur *Trachypithecus pileatus*, Asian elephant *Elephas maximus*, Himalayan musk deer *Moschus chrysogaster leucogaster*, Himalayan serow *Capricornis sumatraensis thar*, black-necked crane *Grus nigrocollis*, rufous-necked hornbill *Aceros nipalensis*, and white-bellied heron *Ardea insignis*. The country is presently known to have 22 globally threatened species of mammal and 15 of bird.

**Protected Areas:** In keeping with the need to maintain its rich biological diversity for sustainable development, the country has designated a sizeable portion of its territory – more than 28 per cent – as protected areas. The protected areas are Jigme Dorji National Park, Jigme Singye Wangchuck National Park, Royal Manas National Park, Thrumshingla National Park, Bumdeling Wildlife Sanctuary, Khaling Wildlife Sanctuary, Phipsoo Wildlife Sanctuary, Saktien Wildlife Sanctuary, and Torsa Strict Nature Reserve. Of these, Jigme Dorji National Park is the largest with an area of 4,349 km<sup>2</sup> while Khaling Wildlife Sanctuary is the smallest with an area of 273 km<sup>2</sup>. All the protected areas are linked by biological corridors to maintain contiguity of natural habitats and facilitate wildlife migration.

Protected areas approach in the country departs from the conventional "exclusionary" approach in that it recognizes human-nature interaction as a part of the ecosystems. Local communities have the right to live in a protected area and subsist on natural resources therein but within the limits of sustainability and in

harmony with the environmental conservation objectives for which the protected area was established. Efforts to integrate nature conservation objectives and local community development needs in a mutually reinforcing manner are inherent in the protected area management programmes. Irrespective of their classification as a national park or wildlife sanctuary, the protected areas are based on a common management concept of zonation, allowing for varying degrees of human intervention or use in different zones along a continuum (core zone-multiple use zone-buffer zone).

#### **4.2.2 Preliminary Assessment of Project Impacts**

While the project is classified as environmental category B, the overall project outcome is expected to be overwhelmingly beneficial from environmental and social perspectives. However, the risks associated with implementation of project activities inside protected areas, which are areas of ecological sensitivity and of high conservation value, both nationally and internationally, could be high requiring extra diligence. Past experience has shown that when protected area and forest reserve improvement/development activities which may have adverse environmental impacts are undertaken by responsible national agencies, the need to carry out environmental assessments has been overlooked.

EMF has been designed to achieve sound environmental practice in SRCWPP. The EMF provides the mechanism to allow program implementation by screening out or enhancing acceptability of sub-project proposals on the basis of environmental criteria. By a simple process of elimination, the first step in the screening process is to identify subproject activities not suitable for funding. It is recommended that the following types of subprojects are not financed and therefore should be considered as a "Negative List":

- Sub-projects that involve the significant conversion or degradation of critical natural habitats such as sensitive ecosystems
- Activities that could lead to invasion or spread of weeds and feral animals or the use of toxic chemicals
- Activities that could dangerously lead to the exposure of sensitive/critical/vulnerable habitats
- Construction of large new infrastructure within protected areas
- Illegal Activities as defined specifically under laws of RGOB

The following sections of the framework try to identify the possible environmental that could arise in each component and how best they could be assessed and addressed during project implementation.

#### **Component 1: Capacity building for addressing the illegal trans-boundary wildlife trade**

***Sub-component 1.1 Institutional strengthening in wildlife conservation and illegal wildlife trade control:*** This sub-component would support the establishment of an information/intelligence network that will contribute towards strengthening enforcement and control of illegal wildlife trade. There will not likely to be any physical activities that could generate negative environmental impacts. Improvement of enforcement and control of illegal wildlife trade would bring about positive environmental impacts.

***Sub-component 1.2 Staff capacity building and training toward regional collaboration:*** This sub-component will facilitate staff capacity building and training on wildlife conservation and will not trigger any adverse environmental impacts. In fact, this sub-component will bring about environmentally positive impacts where staff would be adequately skilled to ensure better management of wildlife.

#### **Component 2: Promoting wildlife conservation in South Asia**

***Sub-component 2.1 Virtual Regional Center of Excellence (VRCE) for wildlife conservation:*** This component would support the creation of a virtual regional center of excellence (VRCE) for wildlife conservation. The center will be virtual and will have no central location or physical facility. Assessing

the nature of activities proposed under this sub-component no negative environmental impacts are envisaged.

***Sub-component 2.2 Protected Area (PA) and Government Reserve Forest (GFR) management with regional conservation benefits:***

***Window 1: Conservation, protection and management of PAs and GFRs for regional conservation benefits*** - Priority PAs/GFRs with interconnected habitats and ecosystems with regional countries will be eligible for accessing funds under this window for activities in conservation, protection and management with regional conservation benefits. Typical activities that would be included in PA management plans and are likely to be included in proposals to Window 1 are: i) development of protected area management offices; (ii) wildlife rescue centers; and (iii) information and visitor centers. Activities such as habitat management, species monitoring and endangered species recovery plans etc., will be supported through grant funds outside the framework of this project.

Improvement in park infrastructure may have short-term as well as long-term impacts, if not planned and managed properly. Transportation of material and vehicles from outside the park may pose the threat of introducing invasive species, noise and pollution associated with road work and the resultant disturbance to animals, loss of plants including ones that are of conservation value, burning of uprooted vegetation are some of the factors that will need to be carefully considered. Extraction of raw material for construction such as gravel, sand, etc. within the PA could also take place creating further disturbance to the ecosystem including contributing to habitat degradation. Also, most importantly, one of the major risks would be the possibility of increased wildlife poaching during construction. The siting of ranger offices, staff quarters, visitor facilities, etc. is crucial and has potential to disturb wildlife if the site selection is not done properly. For example, there would be certain species of wild animals that migrate within or among PAs for foraging and establishing building in such migratory paths may affect the wildlife. Issues that may arise during the construction of the buildings are similar to road network improvements related issues discussed earlier. With improvement of park infrastructure, likelihood of increase in visitation would be high. Studies should be undertaken to ascertain the carrying capacity of PAs and PAs should be zoned to include areas open to visitation and areas closed to unsupervised visitation. Unmanaged visitation beyond the carrying capacity of the park will be also detrimental to these sensitive ecosystems.

***Window 2: Innovative pilot projects with a regional dimensions*** – This window has been established for supporting innovative pilot projects with a regional dimension focusing on human wildlife conflict management and ecotourism.

**Human-wildlife conflict management**

It is proposed that pilot projects will be developed to address Human-Wildlife Conflict (HWC) and developing and adopting incentives mechanisms. At this point of time, the types of interventions in terms of pilots are not known. Failure of the pilots is unlikely to lead to any adverse environmental impacts that are not already present. The areas suggested for the pilots are to be implemented are areas with very high HWC at present and any intervention can only improve the situation. Potential social impacts of activities that may take place to manage human-wildlife conflicts are likely to be on livelihood patterns of community members as the pilots may attempt to changes to land use practices of local communities and issues related to safety of community members selected to participate in immobilization and containment of wild animals.

**Ecotourism development**

Numerous examples from places as diverse as Namibia to Australia have demonstrated that ecotourism can be used as a tool for turning wildlife from a liability to an economic asset that creates a powerful

constituency in support of conservation. South Asia with its immense endowment of rare and charismatic species and unique ecosystems has much to offer by way of ecotourism potential. Structural development within PAs and their buffer zones if highly intrusive and poorly planned could cause damage to the ecosystem and scenic landscape. As highlighted under the park infrastructure development, ecotourism development could increase visitation to PAs beyond their carrying capacities contributing towards degrading natural habitats and disturbing the wildlife. Examples of issues include air and noise pollution due to vehicles, solid waste and littering, trampling, tourism leisure activities, etc. For example, wildlife viewing can bring about stress for the animals and alter their natural behavior when tourists come too close. Safaris and wildlife watching activities have a degrading effect on habitat as they often are accompanied by the noise and commotion created by tourists as they chase wild animals in their vehicles. This puts high pressure on animal habits and behaviors and tends to bring about behavioral changes. In some cases, as in Kenya, it has led to animals becoming so disturbed that at times they neglect their young or fail to mate

Attractive landscape sites, such as sandy beaches, lakes, riversides, and mountain tops and slopes, are often transitional zones, characterized by species-rich ecosystems. Physical impacts are caused not only by tourism-related land clearing and construction, but by continuing tourist activities and long-term changes in local economies and ecologies.

The development of tourism facilities such as accommodation, water supplies, restaurants and recreation facilities can involve sand mining, beach and sand dune erosion, soil erosion and extensive paving. In addition, improper siting can lead to land degradation and loss of wildlife habitats and deterioration of scenery. Wetlands are often drained and filled due to lack of more suitable sites for construction of tourism facilities and infrastructure. These activities can cause severe disturbance and erosion of the local ecosystem, even destruction in the long term. Furthermore, extraction of building materials such as sand affects hinterland forests, leading to erosion and destruction of habitats.

#### Greening infrastructure in and around PAs and GFRs

Greening of infrastructure in and around PAs and GFRs would enhance the conservation status of sensitive ecosystems. Hence these activities would be environmentally extremely beneficial, as it will give the opportunity for the government to use mechanisms to ensure the compatibility of infrastructure with the larger ecosystem including land use planning that is ecologically sensitive, wildlife corridors, strategic environmental assessments, other environmental assessments that look at the cumulative impacts on the landscape, human-wildlife conflict risk assessments and guidelines or regulations for green infrastructure.

#### Pilot programs in conservation of endangered flagship species

Conservation of endangered flagship species will bring about positive environmental impacts, as it will address issues of habitat loss, unsustainable and illegal trade, climate change, invasive species and human-wildlife conflict. However, there is potential to create issues both within species and different species such as increased competition for space and food if conservation efforts are not managed properly.

### **Component 3: Project coordination and communications**

This involves a national and regional coordination of project activities and a communication plan to meet local challenges while respecting the overall regional nature of the project. No adverse environmental and social impacts are anticipated through this component.

### 4.2.3 Environmental Mitigation Measures

By design, the project is expected to have far greater environmental benefits than adverse environmental impacts. The potential adverse environmental impacts from the project are likely to be small and limited. However, it is recognized that such impacts can accrue into larger impacts if they are not identified early on in the planning cycle and their mitigation measures integrated in the project planning and implementation. The following table provides direct and significant potential impacts due to project activities. As the actual site of intervention and scope of interventions are not known, it is not possible to provide specific impact level category although preliminary identification based on likelihood has been done.

Activity	Environmental Impacts	Magnitude of Impacts	Mitigation Measures
Establishment of an information/intelligence network	Improvement of enforcement and control of wildlife trade	M	-
Staff capacity building and training	Better management of wildlife	H	-
Creation of virtual regional center of excellence	Better coordination to address illegal wildlife trade issues	M	-
Development of park infrastructure	Improper siting of facilities	L	New infrastructure should be located in areas that are least sensitive to the wildlife and the land Use of nationally approved building codes and green infrastructure principles
	Inappropriate disposal of soil, debris, etc.	L	Suitable locations should be identified for disposal of material, which should be located outside PAs/GFRs
	Extraction of raw material such as gravel, sand, etc. from PAs/GFRs and degrading habitats	L	Extraction of natural resources for construction activities should be from approved localities or from approved commercial vendors
	Poor site management during construction work	L	Good housekeeping practices should be incorporated as part of the contractor contracts and monitored closely
	Noise pollution associated with construction work and the resultant disturbance to wildlife	M	If practical all noise generating activities that can be performed off-site should be carried out outside the PAs/GFRs. If not, appropriate and non-invasive noise barriers should be set up before carrying out such work. All equipment that generates noise including heavy vehicles should be well maintained and serviced to reduce the level of noise pollution
	Increased wildlife poaching during construction	L	Contractors should be closely monitored to ensure no illegal activities takes place during the works Contractors should be made aware of the repercussions of poaching and ensure adequate penalties are put in place for illegal activities
	Better monitoring and patrolling	H	-

	Increased visitation beyond carrying capacity	M	Assess carrying capacities of PAs/GFRs and manage the number of visitations and timing of visitation
	Removal plants of conservation value	L	Close monitoring of contractor work and implementation of penalties
	Spread of invasive species from vehicles and material brought into the park from outside	L	Close monitoring of the vehicle movements and material brought from outside, as well as the construction site and the surroundings for possible contaminations Make arrangements to clean up immediately if invasive species gets established, particularly plants
	Burning of uprooted vegetation and spread of forest fires	L	All uprooted vegetation should be either removed to a sites outside PAs/GFRs or if scientifically appropriate for a given site, leave it within the habitat
Human-wildlife conflict management	Improvement to wildlife populations	M	-
Ecotourism development	Increased visitation beyond the carrying capacity of the PA	L	Assess carrying capacities of PAs/GFRs and manage the number of visitations and timing of visitation
	Physical impacts caused by tourism-related land clearing and construction, continuing tourist activities and long-term changes in local economies and ecologies.	L	Refer to mitigation measure provided under park infrastructure development
	Development of tourism facilities such as accommodation, water supplies, restaurants and recreation facilities can involve sand mining, soil erosion and extensive paving	L	Ensure green infrastructure guidelines are used for such developments taking possible issues highlighted into consideration
	Habitat degradation with air and noise pollution due to vehicles, solid waste and littering, trampling, tourism leisure activities, etc.	M	Develop guidelines to tour operators and tourists and monitor the implementation closely Ensure adequate facilities are available for waste management
	Increased visitation putting pressure on animal habits and behaviors	M	Assess carrying capacities of PAs/GFRs and manage the number of visitations and timing of visitation
	Improper siting can lead to land degradation and loss of wildlife habitats and deterioration of scenery	M	Refer to mitigation measure provided under park infrastructure development Sites that are least detrimental to the natural environment should be used for tourism facilities
Greening infrastructure	Enhance the conservation status of sensitive ecosystems	M	-
Pilot programs in	Address issues of	M	-



conservation of endangered flagship species	environmental degradation, particularly habitat loss		
	Increased intra and inter-specific competition among species	M	Use of historic population data for conservation efforts Conservation plans to be made based on the community requirements as opposed to species-specific interventions within a given locality/habitat
	Opportunities for endangered species to recover to a healthy population size	M	-

Impact categorization: H – High; M – Medium; L - Low

## 5. SOCIAL MANAGEMENT FRAMEWORK

Subproject interventions proposed under this project are expected to be small and cause minimal negative social impacts. Land acquisition and resettlement are unlikely and discouraged under the project. However, as a precautionary measure, a Social Management Framework (SMF) has been prepared to address unavoidable impacts that may arise from: (i) loss of structures; (ii) loss of livelihood systems/income opportunity (due to the loss of productive land or impact to a structure where a livelihood activity is being carried out); and (iii) loss of community property resources (religious structures, grazing land). The framework guides the compensation for lost assets, livelihoods, community property, and resettlement and rehabilitation of project affected people in accordance with the World Bank's Operational Policy 4.12 on Involuntary Resettlement and RGOB guidelines and legislation for similar circumstances. Stakeholder consultations and social screening during the feasibility stage of each activity will identify and categorize the level of impacts and what modalities need to be followed for defined losses to the project.

### 5.1 Definitions

#### 5.1.1 General Definitions

For purposes of this framework, the following definitions will be applicable:

**Project Affected Persons (PAP)** includes any person or persons, households, a firm, or private or public institution who, in the context of acquisition of assets and change in land usage, as of the cut-off date, on account of the execution of the project, or any of its subcomponents or part, would have their:

- Standard of living adversely affected;
- Right, title, or interest in any house, land (including residential, commercial, agricultural and grazing land) or any other moveable or fixed assets acquired or possessed, in full or in part, permanently or temporarily adversely affected; or
- Business, occupation, places of work or residence or habitat adversely affected, with or without displacement provided such occupation is legal under applicable law.

PAP means persons or affected household and consists of all members of a household residing under one roof and/or operating as a single economic unit, who are adversely affected by a project or any of its components.

**Household (HH)** is a group of persons who commonly live together and would take their meals from a common kitchen.

**Replacement Cost** means and includes an amount needed to replace an asset at current value including depreciation and overhead expenses of the transaction, including stamp duty and registration charges, as follows:

- Agricultural land based on its productive potential;
- Residential land based on market value;

- Houses and other related structures based on current market prices of building materials and labor, without depreciation and deductions for salvaged building materials, plus transaction costs (such as administrative charges, registration and titling costs), etc.;
- Trees, crops and plants on current market value; and;
- Other productive assets like shops and commercial assets based on market value of similar location attribute, i.e. premium, etc.

**Cut-off date** is the date prior to which the occupation or use of the project area makes residents/users of the project area eligible to be categorized as affected persons. In many projects, the cut-off date coincides with the commencement of the census of affected persons within the project area boundaries. Persons not covered in the census will not be eligible for compensation and other entitlements. *For PAPs with legal titles the cut-off date would be the date of issue of legal notice under the Land acquisition act. For those without titles, the cut-off-date will be the date of commencement of census.*

**Land:** The term land refers to land acquired under the land acquisition act of the given country or through private transactions.

**Squatters** are persons who occupy / possess an asset without legal title.

**Encroachers** are those owners of land adjacent to public property, who have illegally extended their land holdings or structures into the public land.

**Vulnerable groups:** These are distinct groups of people who might suffer disproportionately or face the risk of being marginalized from the effects of the project and include: (i) female headed households with dependents, (ii) disabled household heads, (iii) households falling under the generally accepted indicator for poverty, (iv) elderly households with no means of support and landlessness, and (v) indigenous people or ethnic minorities.

**Severely Affected households:** These are households that will be affected by any one of the following : (i) Significant loss of income (> 50%) and (ii) Loss of accesses to common property resources for those whose livelihoods depends on these.

### 5.1.2 Social Assessment

#### Categories of Impacts

Following basic categories of issues/impacts may take place under this project, though land acquisition and large scale loss of livelihood are highly unlikely:

- a) Loss of structure;
- b) Loss of source of livelihood;
- c) Loss of access to common resources and facilities;
- d) Loss of standing crops, trees and perennial trees; and
- e) Loss of public infrastructure.

#### Impacts and Entitlement Framework

Entitlements for compensation and rehabilitation assistance to different categories of PAPs that are likely to be applicable for this project are described in the following sub-sections of this section:

##### I. PAPs losing Agricultural Land

- (a) When the portion of the land to be lost represents 20% or less of the total area of the landholding, cash compensation at full replacement value, will be provided to the PAP except where the portion of a landholding is critical to livelihoods such as alluvial plains. Where significantly large or entire land holding is affected by the project, the general mechanism for compensation of lost agricultural land will be through provision of "land for land" arrangements of equivalent productivity and at location acceptable to the PAP. In case suitable replacement land is not available, at the PAPs request cash compensation at replacement cost will be provided. Because many rural dwellers and poor people may be unaccustomed to managing large sums of cash, compensation payments would be made with supervision by appropriate personnel to assure that the beneficiary makes good use of the compensation received. In cases where only partial land is affected but the remaining land becomes economically unviable, the PAP will be entitled to compensation for entire holding at full replacement value or land-for-land option.
- (b) The replacement agricultural land will be provided to the PAP free of any tax, transfer costs, registration fee or charges.
- (c) PAPs whose land is temporarily taken by the works under the Project will be compensated at replacement cost for their net loss of income, damaged assets, crops and trees, as the case may be and their landholding will be restored at least to its original condition or improved.
- (d) Affected tenants and leaseholders on the agricultural land will be compensated for the market value of the gross harvest for one year's production or the remaining period of the tenancy agreement/lease, whichever is greater.
- (e) Affected agriculture labor will be compensated for the loss of income and will be paid compensation equivalent to the six months wages and assisted in getting alternative employment.
- (f) Squatters and encroachers will not be entitled to compensation for affected land.

## II. PAPs losing Structures

- (a) The mechanism for compensating loss of other structures if established legally or is considered as a right as per the country regulations (example: benefits defined for indigenous peoples) will be cash compensation reflecting full replacement cost of the structures, without depreciation.
- (b) Affected households will also be entitled to a transfer/shifting allowance and a transition allowance for three months. Vulnerable squatters will also be provided with relocation assistance through viable options and assistance packages to choose from.

## III. Loss of Income or employment

Alternatively, income rehabilitation package would be provided to the PAPs for re-employment, training in other trades and skills, agricultural inputs and extension services support, or for starting a new business depending upon their needs and priorities. The type and level of assistance required will be decided in consultation with the PAPs. Furthermore, parties that will be temporarily affected will not be eligible for cash compensation but will be consulted to have a minimization of impacts.

## IV. Loss of standing crops and trees

- (a) PAPs will be entitled to cash compensation equivalent to market value of crops and trees *based on the type, age and productive value of affected trees*.
- (b) Compensation for all types of affected assets will be provided at replacement cost.
- (c) PAPs will be provided with compensation at full replacement cost, without depreciation for any other fixed assets affected in part or in full by the project.
- (d) All PAPs severely affected by the project due to the loss of productive assets, incomes and employment will be entitled to the income rehabilitation assistance including income restoration

programs, training to improve skills or other assistance for self-employment depending upon the needs and priority of the affected PAPs. These rehabilitation measures would specifically focus severely affected PAPs, vulnerable groups and those who are either below the poverty line or those severely affected by the project due to the loss of productive assets or are likely to fall below the poverty line.

- (e) In cases where community infrastructure such as religious facilities, water resources, roads, etc. is affected, project implementing agencies will ensure that alternatives will be provided at no cost to the community. Furthermore alternative routes will be identified if necessary.
- (f) PAPs without any legal title or ownership right to the land they occupy will be compensated for all their lost assets such as structures, fixed assets, etc. at full replacement cost and provided assistance in finding suitable relocation site. The relocation site would, as far as possible, contain the access to facilities and services better than or at least equivalent to the one lost and provided with tenure security.
- (g) In case of other unforeseen impacts not covered above, appropriate measures would be determined keeping in mind the overall objective of this policy.

### **Social Implications to be taken into Consideration**

**Mitigating adverse impacts:** Before taking possession of structures and before start of activities, PAPs will be paid compensation and other assistance in full. Where PAPs are entitled to relocation, the relocation site will be fully developed before the PAPs are displaced. The project will ensure that the standard of living of all affected persons is restored to the level enjoyed before the commencement of the project, and, if possible, improved.

**Compensation at Replacement Cost:** Market surveys are required to establish fair rates for assets lost by squatters, so that they may replace those at current prices and for crops and trees lost by share-croppers, tenant farmers and lease-holders.

**Entitlements to affected people without legal rights to land:** Lack of ownership does not imply ineligibility for compensation rights. The lack of legal tenure to land or assets will not be regarded as a criterion for withholding financial compensation or assistance in relocation in the project. The affected squatters will be carefully screened to ensure that resettlement and rehabilitation assistance is provided only to vulnerable families who are screened out.

**Measures to avoid illegal occupation of land identified for project activities.** The preparation of a Resettlement Plan will require that an early cut-off date, preferably at the time of the baseline survey, is established. The implementing agency will ensure that the information on cut-off date and eligibility are provided to the people with the clear understanding that anyone illegally occupying the land after the cut-off date will not be entitled to any compensation and/or assistance. The implementing agencies will also take appropriate measure to ensure that all lands that is identified for project activities remains clear of squatters. Experience shows that the most effective means of preventing reoccupation of cleared land is to enlist local communities in the prevention and reporting of such occupations.

**Relocation of displaced squatters:** Affected households will be provided with viable options for relocation to choose from that may include, among others: self-relocation; special package for transfer to the place of origin; and relocation to a suitable resettlement site on other public lands in the vicinity. Where attempts to find suitable relocation sites are not successful or the locations of identified sites are not acceptable to the PAPs, other options will be considered in consultation with the World Bank.

**Social Networks:** Planning must take into account existing social networks such as families, clans, religious groups, cooperative labor arrangements and the like. The goal of any dislocation or land acquisition should be to minimize disruption of existing social networks.

**Entitlements:** Compensation amounts will be based on the principle of replacement value. The exact value of compensation and replacement cost will be different for each activity and will be based on an economic and social survey of the area of the activity and of affected persons. Entitlement matrix is provided in Annex 6.

***Potential Social Impacts of the Project and Mitigation measures***

Activity	Social Impacts	Magnitude of Impacts	Mitigation Measures
Establishment of an information/intelligence network	-	-	-
Staff capacity building and training	Opportunities for employment, promotions and training	H	-
Creation of virtual regional center of excellence	Governance issues such as non-representation and lack of ownership	M	The Regional Operational Steering Committee will ensure governance of VRCE With the rotational directorship among participating countries will ensure ownership and representation
Development of park infrastructure	Increased visitation contributing to economy	M	-
	Increased visitation affecting the local culture (local attitudes, consumption patterns and fashion)	M	The tourists may need to be made aware of proper attire, traditional village beliefs about forests and wild life in order to avail such difficult situations which may even put them at risk.
	Increased visitation affecting abuse of drugs, changes in relationship patterns that may pose threats of STDs such as HIV/AIDS and the use of child labor to improve profits	M	In situations of harassments the harassed individuals can call up the tourism hotline based in the site or the nearest police station. Details of relevant authorities and their contact details to respond to such events should be readily available at all times. Awareness campaigns be organized for the communities in order to inform them of the likely positive and negative impacts of tourism and ways in which they can prevent the negative impacts. These awareness campaigns must use local school principals, teachers and religious leaders as resource persons to get a strong message across to the children and youth in the area. These individuals can also be encouraged to conduct similar awareness programs for the community in schools and during religious activities. This would ensure sustainability of knowledge passed through the awareness programs. CBOs

			can also play a useful role in organizing these awareness programs. Professional groups such as lawyers and doctors can also be used as resource persons in these campaigns. Awareness campaigns should be conducted in the main medium of communication in the respective areas with leaflets containing the same information printed in other languages (including English).
	Employment opportunities for villagers living in the vicinity	H	-
	Improved market for the villagers' produce	M	-
Human-wildlife conflict management	Safety of community members participating such as for animal immobilization and containment	L	Use of only trained personal/villagers to carry out such activities Provision of safety equipment, first aid and equipment/vehicle to transport injured persons to hospitals
	Change of land use practices	H	The Resettlement Policy Framework outlines the process whereby stakeholder consultations with communities, who are affected by HWC, should be an integral part of developing pilot projects. Stakeholder consultations can reduce or eliminate any disparities that may exist between research findings and real-life experiences – and research into IPs supposedly more harmonious coexistence with wildlife would also be very valuable for developing suitable pilots. Since the local communities are the major stakeholder (and victim) in the HWC, their views and perceptions on resolving the issues are essential. Consultations with community members must also discuss the impacts the project is likely to have on their land use patterns and livelihoods derived from the PAs. The community can also be given the opportunity to suggest solutions for their problems as well. Land acquisition or forced resettlement of individuals will not be approved or supported under the project because this is contrary to the basic premise of the human-wildlife co-existence models piloted under the project. An independent committee inclusive of representatives of affected communities should be responsible of managing the compensation program. The establishment of local-level GRCs to handle any grievances is also
	Changes to livelihood patterns	H	
	Restrictions to movement of communities	L	

			necessary to ensure equitable opportunities and benefits from the project to the affected communities.
Ecotourism development	Increased tourism contributing to socio-economics	H	-
	Increased visitation affecting the local culture (local attitudes, consumption patterns and fashion)	M	Refer to mitigation measures proposed for infrastructure development section above
	Increased visitation affecting abuse of drugs, changes in relationship patterns that may pose threats of STDs such as HIV/AIDS and the use of child labor to improve profits	M	
	Lack of respect to local cultures and practices	M	
	Harassment of foreign tourists	M	
	Employment opportunities for villagers living in the vicinity	M	-
	Improved market for the villagers' produce	M	-
	Access to potential project benefits in terms of opportunities for skill enhancement in tourism related employment	M	-
Greening infrastructure	-	-	-
Pilot programs in conservation of endangered flagship species	-	-	-

Impact categorization: H – High; M – Medium; L - Low

## 5.2 Assessments and Documentation

### 5.2.1 Preliminary Screening

During the identification and preliminary stages of any activity preparation, the implementing agency will employ the screening check-lists designed for the project. If displacement of people such as squatters is expected a preliminary Assessment to identify the types, degree and scale of potential social impacts of the activity will be undertaken via the check-list (attached in Annex-4). In cases where the preliminary assessment indicates that the potential adverse impact of the proposed project will be significant, appropriate preparation will be done for further surveys and consultation with key stakeholders.

### 5.2.2 Activity Preparation

It is understood that given the short time allowed between the identification and the actual implementation of those activities with social implications, the preparation time for activities will be



minimal. Given the above time constraints, there will not be enough time to conduct a full scale Poverty and Social Impact Assessment (PSIA) for each activity. However where the check-lists demonstrate that displacement of squatters is expected (on public lands, or on private lands) the implementation agency will be responsible for the production of a Resettlement Plan (RP.) The census and the inventory of affected assets will cover all PAPs, regardless of entitlement or land ownership. Criteria for vulnerability of PAPs should be paid particular attention in order to provide additional assistance. All data should be maintained on computerized data management system to facilitate analysis and M&E.

Displacement of squatters may induce the loss of business income, on either a temporary or permanent basis. The Inventory of Losses must record these impacts and, and these must be mitigated in accordance with the Entitlements to ensure that livelihoods are restored.

### **5.2.3 Poverty and Social Impact Assessment (PSIA)**

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief PSIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, impacted people and other relevant stakeholders. The PSIA's will utilize a well planned and all-inclusive communication and consultation strategy and include a baseline survey covering the prevailing status of income, employment, education, age, skills and other socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual RPs created for each location and will be incorporated, along with consultation feedback from those identified in the PAP census and all other relevant stakeholders, in the development of mitigation measures, especially livelihood strategies. Generic guidelines for PSIA are provided in Annex 5.

### **5.2.4 Resettlement Plan (RP)**

*Abbreviated (Summary) Resettlement Plan:* In cases where the impacts of the activities are without any large scale displacement due to squatters, or where the impacts are minor an abbreviated and simplified RP should be prepared. It should briefly document consultation with PAPs, provide a census survey of displaced persons and/or valuation of assets (according to current market prices determined via a market survey), demonstrate the establishment of a cut-off date via the distribution of identity cards to those entitled; description of compensation and other resettlement assistance to be provided, institutional responsibility for implementation and procedures for grievance redress, arrangements for monitoring and implementation, and a timetable and budget. In acknowledgement of the fact that that project preparation time will be very brief, these documents can be allowed to be simplified and concise, as long as the key points mentioned above are documented.

For projects that only affect small numbers of squatters on public or private land (e.g. less than 50 families), the implementing agencies will be responsible to ensure compliance with the Bank policies including keeping records of actions undertaken (the simplified and abbreviated RP) demonstrating that appropriate mitigation actions and compensation took place before physical displacement of PAPs. It is expected that the vast majority of activities will fall in this category. The implementing agencies will be responsible for overall compliance with the requirements of this framework including applying the check-lists to all activities and for producing RPs and SIAs where necessary. Random audits will be performed on this batch of activities to ensure compliance.

### **5.2.5 Social Safeguards Monitoring and Evaluation Approach**

No private land acquisition is expected to take place under the project. Since most activities will be carried out in rural settings where squatters are not widely found, no major displacement is expected. Due to nature of activities and the approach taken, as well as the exact sites of intervention are not known, the implementing agencies will use the screening procedures outlined earlier to identify, assess, evaluate,

mitigate and monitor social impacts of each activity/sub-project. These procedures include the following key points.

- The Project implementing agencies will be responsible to screen all of their sub-projects using a check-list to identify possible social impacts related to either land acquisition resettlement or the presence of IPs in the project areas;
- No involuntary land acquisition is anticipated under the project. If small quantities of land are at all required for some sub-projects (though this is unlikely), it may be acquired on a voluntary basis on willing buyer-willing seller terms where permissible. All land transactions will be recorded. The RPF provides guidelines to comply with World Bank and respective government requirements.
- Although no land acquisition or displacement of squatters is anticipated under this project, if the activities/sub-projects trigger land acquisition and/or are expected to impact squatters or economically displace less than fifty families, an Abbreviated Resettlement Plan (RP) will be prepared by the implementing agency using the procedures and guidelines outlined in this chapter. For activities/sub-projects that trigger the displacement of more than fifty families, a brief Social Impact Assessment will also be carried out, based on which a more detailed RP will be produced. The implementing agency may hire specialist consultants in preparing the RP.
- For projects that only affect small numbers of squatters on public land (e.g. less than 50 families), the implementing agencies will be responsible to ensure compliance with the Bank policies (incorporated in the Resettlement Policy Framework) including producing the RP and keeping records of actions undertaken. It is expected that the vast majority of sub-projects will fall in this category. The Bank will sponsor an independent verification and validation study by a third party monitoring agency via a random audit based on a sample of activities/sub-projects to ensure that adequate safeguards were in place, in line with the provisions of the SMF.
- In addition to the above, for activities/sub-projects that are expected to economically or physically displace more than 50 families a brief SIA will be carried out based on which the RP will be produced. For this batch of activities/sub-projects as well as those involving impacts on Indigenous People a third-Party audit will be undertaken to assess compliance with the requirements. The implementing agencies will be responsible for carrying out implementation of the RPF. The Bank will review the results of the audits and conduct an independent validation and verification via a third party monitoring agency, on a sample basis.
- Potential monitoring indicator identified in Annex 7 will provide the basis to undertake audits.

### **5.3 Grievance Redressal Mechanism**

Despite best efforts to arrive at fair rewards in a project involving possible livelihood compensation and moving of squatters, there are always a few unsatisfied citizens. The implementing agency will make efforts at project level to resolve grievances through negotiations *involving community leaders and PAP's representatives*. In case dispute is not resolved at local level, the matter will be placed before a Grievance Resolution Committee to be established at the regional level.

The Grievance Resolution Committee (GRC) shall be constitute a panel of at least four Members, one of whom shall be the field-based project staff (at the respective sites), to be selected by the implementing agency. S/He will be responsible to provide secretarial support to the panel. It will include a representative from the residents of the project area, who would be publicly known to be a person of integrity, good judgment and commands respect, who can be considered independent and will chair the GRC. Other persons would be at least one representative from local Government bodies or NGO/CBOs and a representative from the PAPs in the area.

The designated project staff shall:

- Convene meetings of the committee as necessary at such place or places in the project area as s/he considers appropriate; and
- Provide all necessary secretarial support to the committee including recording of the committee meeting discussions and dissemination of deliberations and decisions taken to all concerned parties.

The chair of the GRC shall:

- Conduct the proceedings in an informal manner as s/he considers appropriate with the object to bring an amicable settlement between the parties;

The report of the members shall be recorded in writing and attested copies thereof shall be provided to the parties. In case of continuing differences and notwithstanding the provisions of nationally applicable legislation, the GRC can take a decision regarding entitlement and compensation. The decision taken during negotiations and GRC meetings shall be formally recorded for future reference and presentation in the court, if necessary.

If the matter cannot be resolved at the regional level, complaints will be referred to the Project Director, who will head a committee that includes the Social Management Specialist, the respective PAP representative and members of well-known national level NGO/Community-Based Organization (CBOs). All expenses incurred in arranging grievance negotiations and meetings of GRC as well as logistics required, shall be arranged by project-executing agency. These will be part of the project's administrative expenses.

The aggrieved PAP, if not satisfied with the decision of Grievance Resolution Committee, has the right to refer his / her petition to court of law.

#### **5.4 Public Consultation and Participation**

Public consultation is the cornerstone of all project activities. As such, the PAPs will receive prior information of the compensation, relocation and other assistance available to them where applicable; planning and implementation for the acquisition of land and other assets will be carried out in consultation with the PAPs.

The implementing agency will be responsible to carry out continued consultation with and information dissemination to the key stakeholders regarding:

- The relevant details of the project;
- The resettlement plan and various degrees of project impact;
- Details of entitlements under the resettlement plan and what is required of PAPs in order to claim their entitlements (a copy of the entitlement matrix will be provided to the PAPs);
- Compensation process and compensation rates;
- Relocation and resettlement site development operation in order to obtain agreement and support of affected people in participating in these operations;
- Implementation schedule with a timetable for the delivery of entitlements, and
- Detailed explanation of the grievance process.

The implementing agencies shall enlist the help of community leaders and other influential community officials in encouraging the participation of the PAPs in resettlement activities. Finally, they shall attempt to ensure that all vulnerable groups and indigenous peoples/ethnic minorities understand the process and that their needs are specifically taken into consideration.

Public participation will be performed and information will be made available during preparation and implementation of the resettlement plan and at the minimum includes community meetings and focus-group discussions. Public consultation must be appropriately documented.

#### **5.4.1 Consultation Strategy**

As required for informed consultation, concerned implementing agency will provide PAPs with all activity-related information, including that on potential adverse impacts in a language familiar to and understandable by the PAPs. To facilitate consultation the implementing agency will,

- Prepare a time-table for dialogues during activity selection, design and implementation processes, and consult them in manners so that they can express their views and preferences freely.
- In addition to the communities in general, consult community organizations, community elders/leaders and others with adequate gender and generational representation; and civil society organizations like NGOs and groups knowledgeable of issues related communities living within PAs/GFRs.

Consultation will include the activity objectives and scope; the likely key adverse impacts on (and benefits for) communities; communities' own perception of the impacts and feedback; and a preliminary assessment of economic opportunities which the implementing agency could promote – in addition to mitigation of the adverse impacts.

Consultation will in general concentrate on the adverse impacts perceived by the communities and the probable (and feasible) mitigation measures, as well as exploring additional development activities that could be promoted under the project. The implementing agency will keep Minutes of these consultation meetings in the activity files and make them available for inspection by World Bank, respective government officials and other interested groups and persons.

If the presence of people is identified in the sub-project area, based on the baseline data appropriate social tool will be adopted using free, prior, informed consultation. This will serve as the basis for sub-project implementation and monitoring.

#### **5.4.2 Key Impact Areas and Indicators**

The following major impact areas and indicators are suggested for assessment of PAPs concerns and social risks.

##### *a) Cultural Characteristics*

- Relationships with areas where they live -- relating to religious/cultural affinity with the ancestral lands, existence of livelihood opportunities, etc.
- Presence of customary social and political organizations – characteristics indicating internal organization and cohesion of the communities, and their interaction with those of the non-indigenous population.
- Interactions and relationships with other indigenous peoples' groups in the same and other areas.
- Presence of organizations, like NGOs and CBOs, working with community development issues, and their relationships with mainstream organizations engaged in community development activities.

- Identification of any cultural aspects likely to be affected or made vulnerable because of the proposed development works.

b) Settlement Pattern

- The extent to which the settlements are physically separated from those of outside PAs/GRFs, indicating interactions and mutual tolerance between the groups.
- Characteristics indicating physical organization of homesteads, and the existing community facilities, such as schools, water supply, etc.
- Present distance between the settlements and the participating institute.

c) Economic Characteristics

- Prevailing land tenure -- indicating legal ownership and other arrangements that allow them to reside in and/or cultivate the lands in their areas.
- Access to common property resources -- prevailing conditions under which they may have been using natural resources like forests, water bodies, and others that are considered important sources of livelihood.
- Occupational structure -- indicating relative importance of household's present economic activities, and the extent to which they might be affected or benefited because of the proposed activity.
- Level of market participation -- engagement in activities that produce marketable goods and services, and how and to what extent market participation would be affected or enhanced.

## 6. GENDER DEVELOPMENT FRAMEWORK

### 6.1 Gender Terminology

The following provides definitions of commonly used gender terms in order to increase the utility of the gender assessment for project staff and counterparts and to support a better understanding of the framework underlying the gender assessment

**Gender** refers to the social, economic, political, cultural roles and relations between women and men. These roles and relations are learned, practiced, and over time they change and develop. In much of the world today, men and women are socialized differently, with different expectations of and attitudes to their roles and responsibilities. Given this reality, any development intervention may affect women and men differently, and can result in discrimination if gender roles are ignored.

Gender and Development approach focuses on the socially constructed basis of differences between men and women and emphasizes the need to challenge existing gender roles and relations. Focusing on how development impacts both women and men, given their different roles and responsibilities, helps to identify and address the power dynamics and stereotypes that result in discrimination against either sex. Some of the terms in general usage are:

- **Gender Analysis:** The process of gender analysis encompasses a set of qualitative and quantitative social science methodologies used to identify the specific gender differences present in a given society. For example, it may involve a review of data, policies, procedures, plans, budgets, and/or activities, to identify obstacles to opportunities and resources that face either sex. If the findings of gender analysis reveal discrimination against women (or men), specific programs can be designed to address that discrimination, e.g. to increase access to credit or decrease female unemployment. Often the goal of a gender analysis is women's empowerment, discussed below.
- **Women's Empowerment:** Women's empowerment encompasses strengthened capacity of women to equally access resources, opportunities and rights – political, civil, economic, social, and cultural. The term "women's empowerment" has been included because much of the gender analysis that is done reveals a backlog of discrimination against women that must be addressed. However, it is important to avoid the tendency to automatically include "women's projects" or "women's components" in development interventions. Programs must respond in two ways: a) ensure that women and men benefit equally, and b) target resources where necessary to enable one or the other to catch up.
- **Gender Equality:** This term refers to equal access by women and men to opportunities, resources, benefits and rights and responsibilities in all spheres - economic, social, cultural, civil, and political. This is the outcome of projects that have ensured that both women and men benefit equally.
- **Gender Equity:** In order to achieve equality, groups that have been previously disadvantaged may require more investment than those that have had greater access to resources. For example, if men have traditionally enjoyed more access to credit than women, a development project would target women for special and additional access to credit.
- **Gender Integration:** The process of gender integration requires incorporating the data generated through the gender analysis process to support program design, planning, implementation, monitoring, and evaluation of impacts. It contributes to strengthening the project's life cycle by

taking into account the structure of relations between men and women and their relationship to inequality. As a result, it becomes an important factor in managing for sustainable program impact.

- **Gender Mainstreaming:** Gender mainstreaming, particularly defined by the United Nations Economic and Social<sup>21</sup> committee as guidance for bilateral and multilateral assistance and government policies, calls for employing methods, processes and institutional structures for achieving gender equality. Gender mainstreaming goes beyond gender integration as it requires the consideration of gender as a critical element that needs to be taken into consideration in all policies, approaches and decision-making processes while, at the same time, it confronts traditional institutional arrangements in order to generate social equality and change. It is predicated on norms of justice and equality, but also on expectations that women's empowerment and gender equality will improve the lives of families and communities and nations – for more effective and sustainable social, economic and political change.
- **Gender Sensitivity:** This term refers to the understanding that any development intervention may have different implications for women and men, and the determination to factor such differences into development programs. It should be noted that being female is not a guarantee of gender sensitivity: women and men can be equally gender blind and some men may be more gender sensitive than some women.

## 6.2 Process to Follow

Focusing on gender leads to benefits that go beyond the good project performance. Women have primary roles in the collection, transport, use, and management of fuel, fodder, water and other household activities and yet are hardly involved in decision making in the sector. Gender should be addressed through an approach that is participatory and responsive to the needs of the poor, particularly when it involves natural resources management.

The participation of beneficiaries and focus on poverty reduction are two other key determinants of the effectiveness and sustainability of any project. Any project must address the constraints on women's participation in project design, implementation and monitoring and evaluation. The project must also focus on the linkage between gender and poverty, by identifying, for example, households headed by females and those households' special needs. An adaptive, learning, and process-oriented approach works better than a blue print approach. Project beneficiaries are likely to have a stronger sense of ownership when the project gives them enough time, design flexibility, and authority to take corrective action. In this way, they find it easier to incorporate their earlier learning and negotiate with project staff and service providers. Therefore, a mechanism must be built into the project to allow such two-way interactions between the beneficiaries and the service providers.

Three major tools are used to identify and deal with gender issues in the project cycle: gender analysis, project design, and policy dialogue.

*Gender analysis should* be an integral part of the initial social assessment at the screening stage itself. The issues identified can be scaled up during the feasibility and detailed analysis can be carried out during the specific sub-project identification stage.

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<sup>21</sup> <http://www.un.org/documents/ecosoc/docs/1997/e1997-66.htm>

The *project designs should be gender responsive* based on the gender analysis, and should be included in the design documents. The findings and recommendations from the gender analysis during sub-project planning and feedback from beneficiaries during implementation must be discussed thoroughly to determine the need for further action. Listed below are the key action points:

### ***General Checklist***

- Identify key gender and women's participation issues.
- Identify the role of gender in the project objectives.
- Prepare terms of reference (TOR) for the gender specialist or social development specialist of the client
- Conduct gender analysis as part of overall Social Assessment.
- Draw up a socioeconomic profile of key stakeholder groups in the target population and disaggregate data by gender.
- Examine gender differences in knowledge, attitudes, practices, roles, status, wellbeing, constraints, needs, and priorities, and the factors that affect those differences.
- Assess men's and women's capacity to participate and the factors affecting that capacity.
- Assess the potential gender-differentiated impact of the project and options to maximize benefits and minimize adverse effects.
- Identify government agencies and nongovernment organizations (NGOs), community-based organizations (CBOs), and women's groups that can be used during project implementation. Assess their capacity.
- Review the gender related policies and laws, as necessary.
- Identify information gaps related to the above issues.
- Involve men and women in project design.
- Incorporate gender findings in the project design.
- Ensure that gender concerns are addressed in the relevant sections (including project objectives, scope, poverty and social measures, cost estimates, institutional arrangements, social appendix, and consultant's TOR for implementation and M&E support).
- List out major gender actions.
- Develop gender-disaggregated indicators and monitoring plan.

### **6.2.1 Specific Checklists to be covered during various stages of sub-project cycles**

#### **Methodology**

##### ***Desk review***

- Review available information (e.g., statistics, gender analysis, documents of previous projects) in the project area and the socioeconomic profile of the target population.
- Review the relevant legal (e.g., inheritance law), policy (e.g., R&R policy), and institutional framework (e.g., current administrative system for land acquisition, compensation disbursement) and their gender implications.

##### ***Household surveys***

- Draw up gender-disaggregated socioeconomic and cultural profiles and identify the constraints, and needs of the target population.
- Collect quantitative information.



***Participatory methodologies*** (e.g., participatory rapid appraisal, focus group discussions, random interviews, walking tours)

- Collect qualitative information which cannot be collected through surveys.
- Define ways in which men and women beneficiaries and other stakeholders, especially poor women can participate in the project.
- Map out the target areas. Which are the most disadvantaged areas in terms of access to services and poverty level?
- Identify major stakeholder groups and their stake.

***Staffing***

- Ensure adequate gender balance in field teams.
- Select field team members with gender awareness, local knowledge, cultural understanding, and willingness to listen.

**Data to Be Collected**

***Macro institutional framework***

- Gender impact of sector policy; legal and institutional framework.
- Executing agency's capacity and commitment to participatory approaches and gender focus.

***Socioeconomic profile***

***Demographic***

- Composition by gender, ethnicity/caste, age, etc.
- In and out migration trend (male and female)
- Percentage of households headed by females
- Household size
- Age at marriage, by gender

***Economic***

- Income level and sources, by gender
- Expenditure patterns and decision making, by gender
- Land tenure and use, by gender

***Health***

- Population growth rate
- Infant and maternal mortality rates
- Service availability
- Fertility level and decision making
- Food allocation and nutrition level within households, by gender
- Incidence of domestic violence

***Education***

- Literacy and school enrollment ratios, by gender
- School dropout ratio, by gender
- Child labor, by gender

***Status of women***

- Political representation and awareness
- Socio - cultural perceptions and practices of men and women
- Gender-discriminatory policies and laws
- Gender roles and responsibilities

- Broad gender division of labor in productive (e.g., agriculture, income-generating activities) and reproductive (e.g., household chores, child care) responsibilities, and time allocation for each responsibility

#### ***Access, control, constraints***

- How do men and women differ in their access to and control of land, agricultural inputs, extension, markets, employment opportunities, and credit?
- Is external assistance provided to improve access/control? By whom?

#### ***Participation***

- What factors affect the level of men's and women's participation?
- What are the incentives and constraints?
- During which season is the demand for labor highest?
- Which modes of participation do men and women favor (e.g., decision making in planning, cash contribution, labor contribution for construction, training, financial management, organizational management)?

#### ***Project impact***

- Do men and women perceive positive and negative impacts of the project differently?
- Are the benefits likely to be distributed equitably?
- How can negative effects be mitigated?
- Are there any disadvantaged or vulnerable groups?
- Who are they? Where do they live? What are their socioeconomic characteristics?
- How will the project affect these groups?
- *Land acquisition/Resettlement*: Extent of land to be acquired
- What are the gender-specific implications?

#### ***Organization***

- What is the current level of women's representation in other community decision-making bodies?
- Are there local organizations (e.g., local governments, national NGOs, CBOs, mass organizations) that address women's constraints and needs? How can the project link up with them?
- What mechanisms can be used to ensure women's active participation in project activities?
- What organizations can be used to mobilize and train women in the project activities and livelihood options?
- Incorporate the preferences of community men and women on issues such as: number and location of assets and sharing vs. individual arrangement of assets;
- Highlight women's strengths in mobilizing savings and resources.
- Incorporate the preferences of men and women in the community on:
  - financing arrangement
  - possible preferential treatment for very poor, female-headed and other disadvantaged families
  - credit or community-based revolving funds for women Self-Help Groups (SHGs)

#### ***Community participation mechanism***

- Develop a *participation strategy* for men and women during project implementation and M & E.
- Avoid overly high expectation of women's participation and develop a practical schedule, as women often have time and financial constraints. The strategy should incorporate the following:

- *Planning:* Conduct women specific consultation to take their views and suggestions on the design. Any mechanism established during the project design such as grievance mechanisms should have adequate representation from women.
- *Construction:* Ensure work conditions that are conducive to women's participation (e.g., gender-equal wage rates, construction season, toilet and child-care facilities).
- *Monitoring and evaluation (M & E):* Develop a feedback mechanism in which both male and female have a voice. Identify organizations that could facilitate women's participation during implementation and M & E.

#### ***Training options***

- Identify ways to link up with income-generation, literacy, and other activities to support an integrated approach to poverty reduction and women empowerment
- Support a decentralized structure to allow linkages between the village and local government.
- Include financial and technical capacity building for relevant local government bodies to enable them to effectively support women SHGs.

#### ***Staffing, scheduling, procurement, and budgeting***

- Hire female project staff.
- Consider seasonal labor demand in scheduling civil works.
- If appropriate, set a minimum percentage of female laborers and prohibit the use of child laborers in the civil works contract.
- Ensure adequate and flexible budgeting to allow a "learning" approach (e.g., training budget, consulting service budget for women's organizations).

#### ***Monitoring and evaluation***

- Develop M & E arrangements: (i) internal M & E by project staff; (ii) external M & E by NGOs or consultants, as necessary; and (iii) participatory monitoring by beneficiary men and women.
- Disaggregate all relevant indicators by gender such as number of women gaining access to credit, increase in women's income, and career prospects for project trained women.

#### ***Documentation***

- Document the gender-responsive design features in the sub-project proposals

## **7. PLANNING, IMPLEMENTATION & MONITORING ARRANGEMENTS FOR ENVIRONMENTAL AND SOCIAL SAFEGUARDS MANAGEMENT**

### **7.1 Planning, Implementation and Monitoring Arrangements for ESMF**

The Wildlife Conservation Division (WCD) will be responsible for implementing the ESMF, conducting the overall monitoring of the Project's environmental safeguard activities and ensuring the proposed activities are in compliance with the ESMF. WCD will ensure that their team has at least two members assigned to supervising, developing necessary documentation (i.e. EAs, PSIA, EMPs, etc.), monitoring and reporting on environmental and social safeguards.

All activities that involve physical interventions on the ground will be screened using environmental and social checklists (Annexes 1 and 2). The field unit of WCD proposing the activity will prepare the checklists. The WCD environment and social specialists will recommend the type of assessment and/or plan needed to ensure safeguards upon review of the checklist.

Any civil works must include construction guidelines or other pertinent environmental guidance in bidding documents for contractors. New physical interventions will require EA. Environmental impacts from small-scale construction, upgrading or refurbishing activities outside of PAs/GFRs can be managed through screening, application of construction guidelines and the development and application of an EMP.

In order to ensure potential social issues including possible resettlements and effects on livelihoods will be managed through Bank's OP 4.12. Based on the information generated through the social checklist and the guidance of the framework, WCD will make the decision, with the concurrence of the Bank, on what actions are to be taken to ensure social safeguards compliance.

The WC will be responsible for preparing the TORs for EA and EMP and for carrying out the assessments (with or without public consultation as the need may be) with World Bank concurrence. The Chief Forest officer (CFO) as the Project Director will formally submit the EA for RGOB concurrence and then the World Bank's no objection. Once the project is approved and implemented, monitoring of implementation progress of each sub-project will be carried out periodically by the WCD and World Bank. The WCD will monitor the project and submit monitoring reports to the World Bank.

### **7.2 Stakeholder Consultation and Disclosure**

Stakeholders for this project include communities in the buffer areas of PAs, government department staff, entities such as Department of Forests and Park Services, environmental conservation NGO lobby, wildlife enthusiasts and private sector involved with ecotourism. In keeping with consultation requirements with Category B projects, the project will require to conduct extensive consultations with the stakeholder groups as part of project implementation in order to obtain a wide spectrum of views, ideas and concerns about conservation priorities in the participating country. In addition, during implementation the relevant agencies will need to consult with such groups as necessary to address mandatory EA-related issues that affect them.

As this is a category B project, the ESMF has to be disclosed to the public. A soft copy of the framework has been posted on the websites of the key implementing agency, Wildlife Conservation Division. Hard copies have been made available in the two agencies for review by interested sections of the public and

will be placed at appropriate localities once specific sites are identified for project interventions. The framework will also be made available at World Bank's public information centre in accordance with the BP 17.50 requirements of disclosure. The implementing agency will organize special workshops, if needed, to evince feedback, and these should be incorporated into the project implementation. All EIAs/IEEs/PSIAs/RPs/IPPs that will be prepared by the project once it is effective shall also adhere to this disclosure policy.

### **7.3 Capacity Building and Training**

In Bhutan, the concept of EIA in the country is about 10 years old. Bhutan's environmental safeguards policies are relatively effective based Bhutan's current capacity and commitment to implement the policies. 2008 Country Environmental Safeguards Review has demonstrated that the agencies responsible for implementing Bhutan's environmental policies, laws, regulations and guidance have capacity to fulfill their responsibilities. While certain amount of social safeguards are in place, it still has certain gaps. In order to complement the existing capacities and fulfill any gaps, this project-specific framework will be adopted. It has been identified it would be necessary to put in place certain amount of capacity to implement and monitor both environment and social safeguards as defined in this ESMF within the Wildlife Conservation Division particularly in the context of development in PAs/GFRs.

If it is necessary it has been proposed the Department of Forest and Parks Services should conduct a capacity needs assessment (process is provided in Annex 8) and make arrangements to provide training on ESMF requirements and conducting, managing and monitoring safeguards during year 1 of project implementation. In addition, Annex 9 (a) and (b) provide the TOR for social development officer and environmental officer, if additional staffing is required to be included within the implementing agencies based on the capacity needs assessment.

## Annex 1 - Environmental Checklist

Title of sub-project/activity:

Brief description of the sub-project/activity:

Location:

INTRODUCTION				
1	Does the site /project require any;	Yes	No	If yes, give the extent in ha
	Reclamation of land/wetland	<input type="checkbox"/>	<input type="checkbox"/>	
	Clearing of forest	<input type="checkbox"/>	<input type="checkbox"/>	
	Felling of trees	<input type="checkbox"/>	<input type="checkbox"/>	
2	Distance from coastline (m) (high water mark)			
3	Minimum land area required for the proposed development (based on urban guidelines) (ha)			
4	Available total land area within the identified location (ha)			
5	Expected construction period (for infrastructure projects)			
6	Anticipated Date of Completion			
7	Present Land Ownership	State <input type="checkbox"/>	Private <input type="checkbox"/>	Other (specify)
8	Total approximate Cost of the Project			

DESCRIPTION OF THE ENVIRONMENT				
PHYSICAL				
9	Topography & Landforms (map): Attach an extract from relevant 1: 50,000 topographic sheet/ if detailed maps are available provide them. If this information is unavailable, please describe the location.			
10	Relief (difference in elevation)	Low <20m <input type="checkbox"/>	Medium 20-40m <input type="checkbox"/>	High 40-60 <input type="checkbox"/>
11	Slope	Low <30% <input type="checkbox"/>	Medium 30-40 % <input type="checkbox"/>	High 40-60 % <input type="checkbox"/>
12	Position on Slope	Bottom <input type="checkbox"/>	Mid-slope <input type="checkbox"/>	Upper-slope <input type="checkbox"/>
13	Soil Type			
14	Depth of top soil	Shallow < 20cm <input type="checkbox"/>	Moderate 20 – 100 cm <input type="checkbox"/>	Deep >100cm <input type="checkbox"/>
15	Soil Erosion (this information will be based on the site and surrounding environment)	Low <input type="checkbox"/>	Medium <input type="checkbox"/>	High <input type="checkbox"/>
16	Climate	Wet <input type="checkbox"/>	Dry <input type="checkbox"/>	Arid <input type="checkbox"/>
17	Annual dry period			

DESCRIPTION OF THE ENVIRONMENT						
PHYSICAL						
18	Source of fresh Surface Water	Spring/ canal <input type="checkbox"/>	Tank/Rese rvoir <input type="checkbox"/>	Perennial Stream <input type="checkbox"/>	Seasonal Stream <input type="checkbox"/>	None <input type="checkbox"/>
19	Surface Water Use (at the site and/or surrounding environment)	Domestic <input type="checkbox"/>	Washing/B athing <input type="checkbox"/>	Irrigation <input type="checkbox"/>	Animal use <input type="checkbox"/>	Other <input type="checkbox"/>
20	Surface Water Quality	Poor <input type="checkbox"/>		Moderate <input type="checkbox"/>		Good <input type="checkbox"/>
21	Ground Water Availability	Dug Well <input type="checkbox"/>		Tube Well <input type="checkbox"/>		Other (specify) <input type="checkbox"/>
22	Ground Water Use	Domestic <input type="checkbox"/>	Washing/B athing <input type="checkbox"/>	Irrigation <input type="checkbox"/>	Animal use <input type="checkbox"/>	Other <input type="checkbox"/>
23	Ground Water Quality	Poor <input type="checkbox"/>		Moderate <input type="checkbox"/>		Good <input type="checkbox"/>
24	Incidence of Natural Disasters	Floods <input type="checkbox"/>	Prolonged droughts <input type="checkbox"/>	Cyclones/ tidal waves <input type="checkbox"/>	Other (specify) <input type="checkbox"/>	
25	Geological Hazards	Landslides <input type="checkbox"/>	Rock falls <input type="checkbox"/>	Subsidence <input type="checkbox"/>	Other (specify) <input type="checkbox"/>	

ECOLOGICAL						
26	Habitat Types in the Project Site (indicate the approximate % of each habitat type)	Natural forest	degraded forest	natural scrubland	riverine forest	abandoned agricultural land
		marsh	lagoon	estuary	coastal scrub	mangrove
		salt marsh	home-gardens	grassland	degraded scrubland	Other (list)
27	Habitat types within 500m radius from the site periphery (indicate the approximate % of each habitat type)	Natural forest	degraded forest	natural scrubland	riverine forest	abandoned agricultural land
		marsh	lagoon	estuary	coastal scrub	mangrove
		salt marsh	home-gardens	grassland	degraded scrubland	Other (list)

Screening Questions	Yes	No	Scale of impacts			Remarks
			High	Medium	Low	
<b>A. Siting of the Activity / Sub-project</b>						
Are there any environmentally and culturally sensitive areas within the project site and 500 meters from the project boundary?						
• Protected Areas / Forest Reserve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Migratory pathways of animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Archeological sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Screening Questions	Yes	No	Scale of impacts			Remarks
			High	Medium	Low	
• Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Mangroves strands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Estuarine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Bufferzone of PAs/FRs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Special area for protecting biodiversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there any plants (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there any animals (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>B. Potential Environmental Impacts</b>						
Will the activity / sub-project cause						
▪ land disturbance or site clearance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on designated wetlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ spread of invasive plants or animals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on wildlife habitat, populations, corridors or movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on locally important or valued ecosystems or vegetations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ destruction of trees and vegetation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impact on fish migration and navigation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ obstruction of natural connection between river and wetlands inside project area or natural drainage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Screening Questions	Yes	No	Scale of impacts			Remarks
			High	Medium	Low	
system?						
▪ water logging due to inadequate drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ insufficient drainage leading to salinity intrusion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on surface water quality, quantities or flow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative effects on groundwater quality, quantity or movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased demand of water requirements leading to reduction of water supply for competing uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increase probability of spread of diseases and parasites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ loss of existing buildings, property, economic livelihood?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ negative impact on soil stability and compactness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impacts on sustainability of associated construction waste disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ changes to the land due to material extraction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ traffic disturbances due to construction material transport and wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased noise due to transportation of equipment and construction materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased noise due to day-to-day construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Screening Questions	Yes	No	Scale of impacts			Remarks
			High	Medium	Low	
▪ increased wind-blown dust from material (e.g. fine aggregate) storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ degradation or disturbance of historical or culturally important sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ health and safety issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Will the activity / sub-project require

▪ setting up of ancillary production facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ significant demands on utilities and services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ accommodation or service amenities to support the workforce during construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: Please add any other screening questions relevant to the proposed activity / sub-project. Also provide additional explanation of the responses and/or positive impacts in the remarks column.

Name of the officer completed the form (project proponent)
Designation and contact information
Overall observation and recommendation
Signature and date

FINAL OBSERVATIONS & RECOMMENDATIONS	
(a)	Does this site require an Initial Environmental Examination/Environmental Impact Assessment (IEE/EIA) or any other Environmental Assessments (EA) under the national regulations and please state the reasons?
(b)	Although national regulations may not require IEE/EIA at this Site, are there environmental issues which need to be addressed through further environmental investigations and/or EA based on the guidance provided in ESMF? If the answer is "Yes" briefly describe the issues and type of investigations that need to be undertaken.
(c)	Will this site be abandoned based on the current observations? If yes, please state the reasons.

**FINAL OBSERVATIONS & RECOMMENDATIONS**

(d)	Does the proposed site meet the national urban planning requirements (only applicable for activities outside PAs)? If the answer is “No”, what needs to be done to meet these requirements; if the answer is “Yes”, has the project site obtained the necessary approvals?	
(e)	In addition to the above issues, please indicate any additional observations, recommendations if any	

Name and Contact Information of the officer who made the final observations and recommendations (PMU)
Signature and Date

## Annex 2 – Social Screening Format

### A. General Information

Title of the Subproject:

Site Locality:

Screening Date:

### B. Project Related Information

B1 Activities includes: **(described in brief regarding subproject activities)**

B2. Describe existing land use/occupancy of site and surroundings in brief and accordingly draw a free-hand map **(Please use separate sheet)**

### C. Socio-economic Information

C1 What are the asset(s) that would be affected due to Subproject Interventions? **Yes or No**

- Land .....
- Physical Structure (dwelling or commercial).....
- Trees/crops.....
- Natural Resources (Water bodies/ Forest/ Public Pond)....
- Community Resource Property.....
- Others (please specify)....

#### C2 Land

C.2.1 Ownership of Land: Public/Private.....

C.2.2 Type of Land: Agricultural/ Homestead/ Low Land /Fallow/ Pond/Others  
Please specify.....

- Does the subproject require additional land permanently or on a temporary basis?  
-----
- Sometimes as part of road/canal/community resource property upgrading interventions, subprojects may require small parcels of land permanently to meet engineering design requirements. In such case what would be the land procurement policy?  
Direct Purchase...Yes/no.....; voluntary donation.....yes/no...;  
acquisition ..... Yes/no.....?
- To except voluntarily donated land what would be the legal procedure?
- In case of land acquisition, will there be physical and/or economic displacement of people?

C2.3 Is there any **squatter/ encroacher/ leaseholder** residing on public lands? **Yes/ No** and specify type

If yes.

- What would be the total numbers of Affected Families?
- Is there any possibility of physical displacement?
- How will their livelihoods be affected? (example: due to loss of shelter and housing structure, loss of income source, loss of grazing field/ social network/ family bondage etc) Do the affected families have school going children? Yes/no  
If yes,.....how many such children are there?
- Among the affected household, is there any person holding long term lease? Yes/no..... if yes, Land uses for what purpose?....., Till how many years remains out of total leasing period?.....

C3 **Structure (Housing/Commercial)**

- C 3.1 Type and total number of Housing structure that would be affected:
- C 3.2 Is there any commercial/ business structure that would be affected?
- C 3.3 Ownership types of the affected structures: Private/ Leaseholder/squatter/encroacher  
Please specify
- C 3.4 Is there any tenant identified using the affected structure? Yes/No

C 4. **Trees and Crops**

- C 4.1 Is there any tree/plant that might be affected? Yes/no..... Total estimated number by size.....?
- C 4.2 Is there any social forestry /plantation project that would be affected? Yes/no.....
- C 4.3 Is there any common fruit bearing tree that would be affected? Yes/no.....  
Species.....
- C 4.4 Any agricultural land included within the subproject footprint? Yes/no.....

If yes, please provide necessary information regarding productivity of land, type and quantity of Crop that might be affected and market value  
.....  
.....

- C 5. Is there any **Community Resource Property** that would be affected?  
Yes/No..... Please Specify..... Who are the beneficiaries of the affected Community Resource? What is their reaction- Positive/negative?.....  
Did they support the project?. Yes/No.....What are the reasons to support/ stand against the project?

- C6. Is there any **Natural Resource** that might be affected? Yes/No.....

If yes, please describe regarding dependency on the Affected Resources

C7. **Indigenous Peoples**

C 7.1 Is there any community of Indigenous Peoples residing within or adjacent the project site?  
Yes/No.....For how long .....

C 7.2 Any Households of Indigenous Peoples would be affected? Yes/No.....  
If yes, how many families would be affected?.....

C 7.2 Is there any way that proposed project may pose any threat to cultural tradition and way of life of indigenous Peoples? Yes/No.....

C 8 **Beneficiaries**

C 8.1 Who are the Beneficiaries? How they would be benefited by the subproject?

- Access to health facilities/services? Yes/No.....
- Better access to schools, education and communication? Yes/No.....
- Project activities would provide income generating source. Yes/No..... Please describe
- Subproject shall promote marketing opportunities of the local products? Yes/No..... If yes, how would that happen? Please elaborate
- Are people ready to co-operate with the project? Yes/No.....  
Please elaborate the reasons

C 9 How will the subproject create opportunities for Beneficiaries?

### **Annex 3 – Generic Guidelines/ TOR for Poverty and Social Impact Assessment<sup>22</sup>**

Poverty and Social Impact Assessment (PSIA) involves the collection of data related to measurable change in human population, communities, and social relationships resulting from a development project or policy change; in this case an eco-systems conservation and management tourism project. The SIA must gather data on the following variables prior to the implementation of the project (planning/ policy development stage).

1. Population Characteristics- present population and expected change, ethnic and racial diversity etc.
2. Establish Socio-economic baseline: Household survey including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the affected population;
3. Assess the magnitude and nature of the expected livelihood impact of proposed sub-project, and basic data on vulnerable groups or persons for whom special provisions may have to be made
4. Community and Institutional Structures- the size, structure, and level of organization of local government including linkages to the larger political systems. They also include historical and present patterns of employment and industrial diversification, the size and level of activity of voluntary associations, religious organizations and interests groups, and finally, how these institutions relate to each other.
5. Political and Social Resources- the distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community or region. Potential impact of project interventions on inter-community relations and local minorities in the wider locality.
6. Individual and Family Changes- factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friendship networks.
7. Community Resources- patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Possible changes for indigenous people and religious sub-cultures also fall here.

#### Scope of work:

1. Gather data on all variables and during all the stages specified above. Mobilization of research assistants in this venture.
2. Use participatory tools in data gathering.
3. Public involvement- Develop an effective public plan to involve all potentially affected publics.
4. Identification of alternatives- Describe the proposed action or policy change and reasonable alternatives.
5. Baseline conditions- Describe the relevant human environment/area of influence and baseline conditions: The baseline conditions are the existing conditions and past trends associated with the human environment in which the proposed activity is to take place.

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<sup>22</sup> These guidelines are based on the international SIA guidelines/ principles put forward by IAIA (International Association for Impact Assessment- USA) (2003) and on the guidelines by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, USA (1994). The consultant/s undertaking each SIA must be encouraged, as much as possible, to follow the international guidelines specified by these organizations. However, certain adaptations may be required to suit the local social, economic and cultural scenario.

6. Scoping- After obtaining a technical understanding of the proposal, identify the full range of probable social impacts that will be addressed based on discussion or interviews with numbers of all potentially affected.
7. Projection of estimated effects.
8. Predicting community responses to impacts- Determine the significance to the identified social impacts.
9. Indirect and cumulative impacts- Estimate subsequent impacts and cumulative impacts. Indirect impacts are those caused by the direct impacts; they often occur later than the direct impact, or farther away. Cumulative impacts are those impacts which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions regardless of which agency or person undertakes them.
10. Changes in alternatives- Recommend new/ changed alternatives and estimate/ project their consequences: Each new alternative or recommended change should be assessed separately.
11. Mitigation- Develop a mitigation plan.
12. Monitoring– Develop a monitoring program.

Expertise required:

This may vary according to the components.

It is recommended that individuals with at least a Master's Degree in social science with experience in applied research techniques be recruited as chief researchers.

Several assistants who possess at least a BA degree should be recruited to support the chief researcher.

Deliverable:

1. Interim reports to be submitted one month after the SIA for comments by the implementing agencies.
2. Final report to be submitted two weeks after receiving comments.



### Annex 4 - Entitlement Matrix

No.	Type of Impact	Entitlement Unit	Entitlement
1	Loss of structures (house, sheds, temporary structures, boundary walls, etc.)	Title holders and non-title holders (tenants)	<ul style="list-style-type: none"> <li>• Cash compensation equivalent to the amount per latest BSR rates at replacement cost without depreciation</li> <li>• Lump sum shifting allowance of Nu. 1500.00 (or actual cost of production of bills) to title holders that will have to shift to a new or reassigned plot</li> <li>• Rights to salvage materials</li> </ul>
2	Loss of economic assets (such as fruit trees)	Title holders	<ul style="list-style-type: none"> <li>• Compensation at replacement cost based on the latest rates</li> <li>• Right to salvage materials</li> </ul>
3	Loss of income /livelihood	Title holders and non-title holders (tenants)	<ul style="list-style-type: none"> <li>• Compensation at replacement cost based on the net revenue earned per month for 3 months to enable them to re-establish their livelihoods</li> </ul>
4	Loss of dwelling	Title holders and non-title holders (tenants)	<ul style="list-style-type: none"> <li>• Reimbursement of rental deposit or unexpired lease amounts</li> <li>• Lump sum shifting allowance of Nu. 1500.00 (or actual cost of production of bills)</li> </ul>
		Vulnerable groups	<ul style="list-style-type: none"> <li>• Resettlement assistance to those that earn less than Nu. 5,000.00 per month and women-headed households with low household productive capacity (no paid employees) to enable them to restore or improve pre-displacement level livelihoods. A lump sum of Nu. 10,000 special assistance is proposed</li> </ul>
5	Shifting/ readjustment of plots	Title-holders	<ul style="list-style-type: none"> <li>• Consultations with PAPs will take place during demarcation of plots to reduce negative impacts</li> </ul>
6	Any other loss not identified	Title holders and non-title holders (tenants)	<ul style="list-style-type: none"> <li>• Unanticipated involuntary impacts will be documented and mitigated at the time of implementation based on the principles provided in the ESMF</li> </ul>

Note: All compensation/assistance shall be paid before relocation/displacement and all such payments will be borne by the RGOB.

## Annex 5 - Social Monitoring Indicators

Monitoring Issues	Monitoring Indicators
Budget and Timeframe	<ul style="list-style-type: none"> <li>▪ Have all resettlement staff been appointed and mobilized for field and office work on schedule?</li> <li>▪ Have capacity building and training activities been completed on schedule?</li> <li>▪ Are resettlement implementation activities being achieved against agreed implementation plan?</li> <li>▪ Are funds for resettlement being allocated to resettlement agencies on time?</li> <li>▪ Have resettlement offices received the scheduled funds?</li> <li>▪ Have funds been disbursed according to RAP?</li> <li>▪ Have the affected HHs been relocated in Resettlement Site?</li> <li>▪ Has the land made encumbrance free and handed over to the contractor in time for project implementation?</li> </ul>
Delivery of AP Entitlements	<ul style="list-style-type: none"> <li>▪ Have all PAPs received entitlements according to numbers and categories of loss set out in the entitlement matrix?</li> <li>▪ How many affected households relocated and built their new structure at new location?</li> <li>▪ Are income and livelihood restoration activities being implemented as planned?</li> <li>▪ Have affected fishing grounds received entitlements?</li> <li>▪ Have the non-titled PAPs been compensated as per RAP?</li> <li>▪ Have the community structures are compensated and rebuilt at new site?</li> </ul>
Consultation, Grievances and Special Issues	<ul style="list-style-type: none"> <li>▪ Have resettlement information brochures/leaflets been prepared and distributed?</li> <li>▪ Have consultations taken place as scheduled including meetings, groups, community activities?</li> <li>▪ Have any PAPs used the grievance redress procedures? What were the outcomes?</li> <li>▪ Have conflicts been resolved?</li> </ul>
Benefit Monitoring	<ul style="list-style-type: none"> <li>▪ What changes have occurred in patterns of occupation compared to the pre-project situation?</li> <li>▪ What changes have occurred in income and expenditure patterns compared to pre-project situation?</li> <li>▪ Have PAPs income kept pace with these changes?</li> <li>▪ What changes have occurred for vulnerable groups?</li> </ul>

## **Annex 6 - Safeguards Capacity Assessment Process**

### **Introduction**

To support the capacity development process effectively requires identifying what key capacities already exist and what additional capacities may be needed to reach objectives. This is the purpose of a capacity assessment. A capacity assessment is an analysis of desired capacities against existing capacities which generates an understanding of capacity assets and needs that can serve as input for formulating a capacity development response that addresses those capacities that could be strengthened and optimizes existing capacities that are already strong and well founded. It can also set the baseline for continuous monitoring and evaluation of progress against relevant indicators and help create a solid foundation for long-term planning, implementation and sustainable results.

In the present requirement, it is necessary to assess the level of capacity to ensure environmental and social safeguards requirements of the participating countries, as well as the World Bank are adequate. If it is not adequate, the assessment will identify the type of capacity needs in terms of specialized staffing and/or training of existing staff in order to fulfill the requirements.

### **Framework for capacity assessment**

These are the four capacity issues that to be the most commonly encountered: 1) institutional arrangements; 2) leadership; 3) knowledge; and 4) accountability. The capacity assessment team should at least consider all of them as it defines the scope of an assessment. They can be amended based on the needs of the client and the situation. In addition to functional capacities necessary to manage the Environmental and Social Management Framework will need to be assessed.

### **The process for conducting a capacity assessment**

It is suggested that the team follows a three-step process to conduct a capacity assessment. The activities in each step aim at deepening engagement of implementing team and promoting dialogue among key staff around the capacity assessment process.

- Mobilize and design: Engaged team and a clear design are key to a successful capacity assessment. The design is driven by three guiding questions: 1) capacity for why?; 2) capacity for whom?; and 3) capacity for what?.
- Conduct the capacity assessment: During the capacity assessment data and information are collected on desired and existing capacity. This data and information can be gathered by a variety of means, including self-assessment, interviews and focus groups;
- Summarize and interpret results: The comparison of desired capacities against existing capacities determines the level of effort required to bridge the gap between them and informs the formulation of a capacity development response including terms of reference for new expertise if needed..

## **Annex 7 - TORs for Social Development and Environmental Officers**

### **(a) Social Development Officer**

Specific responsibilities of the Social Development Specialist at the project implementation level will include the following:

- Ensure that social issues and social management activities identified as part of Environmental and Social Management Framework including Indigenous Peoples Plan and Gender Development Plan are mainstreamed into the design and plan at the subproject level. In conjunction with the implementing agency, Social Development officer would conduct the social appraisal for the work plan of each sub-project and for providing the final social clearance to the workplans.
- Undertake field visits to the selected sub-projects to assess, how social issues related to the project activities are addressed at the subproject level.
- As part of the field visits, hold discussions with the PAPs and other relevant stakeholders and guide them in addressing social issues with particular reference to resettlement and impacts on livelihood, indigenous and gender development.
- Assess the completeness and appropriateness of the Poverty and Social Impact Assessments / Resettlement Plans (RPs) based on the field visit observations.
- Determine compliance of the safeguard management plans prepared at the sub-project level with the agreed the Social and Environmental Management Framework including policy frameworks and strategies on resettlement, indigenous and gender development, etc.
- Interact and coordinate within the implementing agency and other related departments/agencies particularly those dealing with development schemes for rural families, tribal and women to ensure dovetailing their programs for the benefit of these vulnerable sections.
- Develop monitoring formats to be used at the subproject level.
- Ensure that participatory monitoring is carried out by stakeholders and that the lessons learnt are reflected in activities of the subsequent irrigation schemes covered under the project.
- Review the monitoring reports prepared by the field staff and consultants on the preparation of assessments and implementation of plans. Based on these reviews (i) identify deviations, if any, in implementing social measures, (ii) identify positive measures taken at the sub-project level, (iii) suggest improvement in the social management plans and implementation at the sub-project level and (iv) disseminate good practices to the project functionaries.
- Prepare 'case studies' based on the reviews of monitoring reports and sample survey of the selected sub-projects and document procedures adopted, problems faced and good practices in planning and implementing social management plans.
- In order to review the actions taken by the project field officers, organize periodic meetings.
- Prepare and implement, as an on-going activity, plan for training and capacity building of the project functionaries to address social issues associated with the project.
- Have regular interactions with the Social Development Specialist of the World Bank on social and environmental management activities of the project.
- Any other responsibility assigned by the head of the project team

Qualification and Experience: Post Graduate in Sociology / Social Science / Anthropology / Community Development with suitable experience in community development, participatory natural resource management, community mobilization, gender and rural development. The candidate should be conversant with the Participatory Rural Appraisal techniques and other participatory approaches with aptitude for participative monitoring and evaluation in water resources sector and irrigation sub-sector.

The candidate should be well versed with the socio-economic conditions of the project area and be well conversant with the local language.

**(b) Environmental Officer**

The Environment Officer of the project will be the central resource person for planning, formulation and coordination of the environmental management activities concerning all the environmental aspects of the sub-projects. The Environment Officer will be based in the implementing agency and will report directly to the head of the project team. Specifically, the responsibilities of the Environment Officer will include the following:

- The Environment Specialist will be the primary person responsible for ensuring that the environmental components of the Environmental and Social Management Framework are properly integrated into the Project Operations. In conjunction with the Social Development Officer, he/she would conduct the social and environmental appraisal for the work plan of each sub-project and for providing the final social/environmental clearance to the work-plans.
- Field visits to the selected sub-projects to assess, how environmental issues have been addressed on the ground. Field visits should include discussions with the project stakeholders.
- Assessment of the completeness and appropriateness of the environmental components of the framework and associated strategies and action plans, based on the field visit observations.
- Determination of compliance of sub-projects to National, State and World Bank safeguard requirements based on the field visit observations.
- Ensuring that regular monitoring reports are prepared for the environmental safeguards.
- In conjunction with the Social Development Officer, organizing and supervising the consultancy for social and environmental audits of the Project.
- In conjunction with the Social Development Officer, preparation of half-yearly reports on the status of social and environmental aspects of the sub-projects under implementation, including (i) the deviations in implementing environmental measures, if any, (ii) positive measures taken at the sub-project level, if any, (iii) reconciliation of the findings of the external and internal audit reports, and (iv) suggestions for further improvement of environmental management practices at the sub-project level.
- Ensuring that environment-related modules are incorporated in the training and capacity building programs designed for the Project at all the levels.
- Interactions with the External Consultants and World Bank Mission on Environmental aspects.
- Any other responsibility assigned by the head of the project team

Qualification and Experience: Post Graduate in Environmental Sciences/ Engineering or a related field with suitable experience in environmental management and monitoring with special emphasis on natural resources management and conservation. The candidate should be well versed with preparation of environmental management and action plans. He should be conversant with environmental monitoring tools and techniques. Familiarity with procedures and practices of the government and the World Bank is a must